

SEQUENCE LISTING

<110> Houghton, Raymond L.
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<120> COMPOSITIONS AND METHODS FOR THE THERAPY
AND DIAGNOSIS OF BREAST CANCER

<130> 210121.470C11

<140> US

<141> 2002-02-13

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 ggtttgccac acacgtgact ggacagtgtc caattcaaat ctttcagggc agagtccgag 240
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<212> DNA

<213> Homo sapien

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TTTTTTTcct	tcttcatcct	cctcctTTTT	taaaagtcaa	cgagagcctt	cgctgactcc	240
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<211> 256

<212> DNA

<213> Homo sapien

<400> 13

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aatgcttagg	tattggcctt	ttctctggaa	accatatttt	tcctTTTTta	ataatcaact	180
aaaatgtata	tgTtaaaaag	cctcatcttt	Tgattttcaa	tatacaaaat	gctttcttta	240
aaagaacaag	attcaa					256

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<211> 301

<212> DNA

<213> Homo sapien

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gtccctcctc	catggcctgc	aaccCaatga	ctatgggggt	gacacaagtg	acctctgccc	240
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<211> 259

<212> DNA

<213> Homo sapien

<400> 15

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acgaagcaat	actaaaatca	atacactcga	Tcaggtcttc	atcagatacc	acgtcactgt	180
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<210> 16

<211> 301

<212> DNA

<213> Homo sapien

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 acaatacaca gctcttttaa gctgttcata ttcttccccc attaaacacc tgccccgggc 240
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 a 301

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 ttttgtgcaa acatcaaagtg tcaactgggtg tcacagaagg cttttttgac tagccttaaa 240
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 t 301

<210> 22
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<400> 22
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 a 301

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 <212> DNA
 <213> Homo sapien

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 <211> 302
 <212> DNA
 <213> Homo sapien

<400> 25
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<210> 26
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 <212> DNA
 <213> Homo sapien

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 t 301

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 <213> Homo sapien

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 ggaacagggt agggcgtttc gccctctctc cctctccctt tttcaacctc ttaatcactg 240
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<210> 29
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<212> DNA

<213> Homo sapien

<400> 29

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<211> 332

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<213> Homo sapien

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gaggaagat gatttcaatt tgatttcaac ttaaccttca tctttgtctg ttaacactaa    240
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<210> 31

<211> 141

<212> DNA

<213> Homo sapien

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<211> 201

<212> DNA

<213> Homo sapien

<400> 32

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catccacctt cataaccaac atagatgtga ggtccactgc actgatagcc agactgcctg    180
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<210> 33

<211> 181

<212> DNA

<213> Homo sapien

<400> 33

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tagagaacct aaactaatat attaaacagg atagaaacag gctgtctggg tgaaatggtt    180
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c

181

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 acttttcagt cgagggcctg atgaatcttg g 151

<210> 35
 <211> 291
 <212> DNA
 <213> Homo sapien

<400> 35
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<210> 36
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 <213> Homo sapien

<400> 36
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 gtgaaacaca caagccaatc cggaactgct gtgcgaaaga taaaatcgag aaaggcaagg 180
 tttcggtagg aggacgcgat g 201

<210> 37
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 <213> Homo sapien

<400> 37
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 c 121

<210> 38
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<400> 38
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gctgtctggt gctgctgtta

200

<210> 39
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<212> DNA
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ttttaacagt	gatcaaatta	ttatttcgaa	gttaatcgtt	cccttggtgg	ctgcatacac	180
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gtcatcccca	gggtctatac	atactatgtt	tcaactgtat	tatttgccat	ttttggcatt	300
agaatgcttc	gggaaggctt	aaagatgagc	cctgatgagg	gtcaagagga	actggaagaa	360
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caaaaaggca	ctcaactagg	aataaacact	ctacagaggt	ttctcagtgg	cccatctgt	480
gtgatatgcg	gggtctacaca	aaaatagctt	cttttgcttt	gttctgttct	tatacctgtc	540
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<210> 40
<211> 452
<212> DNA
<213> Homo sapien

<400> 40

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ggtttatcgt	gacttttctt	tcttgtttac	ttttcgctag	gaaggggagt	tgtaggggca	180
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ggtggaagt	ggcgaaatgg	atatgggtaa	gggaacacaa	aaaaccctga	agctaattca	300
tccatgtcac	tgatacttct	ttttctcgt	tcctggtctt	gagagactgg	gaaaccaaca	360
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<210> 41
<211> 676
<212> DNA
<213> Homo sapien

<400> 41

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ttccccattt	aaattttaca	ttacttgcca	agaaaaaaaa	aaaattaaaa	ctcaagttac	180
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gccccatccc	cagctaggag	aatggaaatg	gaaactttta	ttgccagtg	ggtgtgaaag	600
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cagacctgcc cgggcg

676

<210> 42

<211> 468

<212> DNA

<213> Homo sapien

<400> 42

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ctcagccctg	gtgggcagag	aggtagggat	ggggctgtgg	ggatagttag	gcacgcgaat	180
gtaagactcg	ggattagtac	acacttggtg	attaatggaa	atgtttacag	atccccaagc	240
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aaaaccccct	gcaaagccca	gcttgaaacc	ttcacttagg	aacgtaatcg	tgtcccctat	420
cctacttccc	cttctctaatt	ccacagacct	gcccgggcgg	ccgctcga		468

<210> 43

<211> 408

<212> DNA

<213> Homo sapien

<400> 43

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acctctttcc	actaattggc	tatgtctctg	gacagttttt	tttttttttt	ttttttttta	180
accttttctg	aacttttact	ttctatggct	acctcaaaga	attgtttgtga	ggcttgagat	240
aatgcatttg	taaagggctt	gccagatagg	aagatgctag	ttatggattt	acaaggttgt	300
taaggtctga	agagtctaaa	acctacagtg	aatcacaatg	catttacccc	cactgacttg	360
gacataagtg	aaaactagcc	cgaagtctct	ttttcaaatt	acttacag		408

<210> 44

<211> 160

<212> DNA

<213> Homo sapien

<400> 44

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ctctctgtgc	tacaatgatt	gcaccttctc	acgcaacact	ccaaccagga	ctttcaacta	120
caactttctc	gctttggcaa	acaccgtcac	tcttgctgga			160

<210> 45

<211> 231

<212> DNA

<213> Homo sapien

<400> 45

cgagcggccg	cccgggcagg	tctggggagg	tgattccatc	cagagtcata	tctgtttgtca	60
ccccaaataag	tgcagcagca	aggctgacag	gctgtgagga	aaccccggcc	ttgtagcctg	120
tcacctctgg	ggggatgatg	actgcctggc	agacgtaggc	tgtgatagat	ttgggagaaa	180
acctgactca	ccctcaggaa	tccggagggtc	ggtgacattg	tcggtgcaca	c	231

<210> 46

<211> 371

<212> DNA

<213> Homo sapien

<400> 46

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ctgtatatgc agaatctttt ccctaaatac tgcttcgtcc catgtctgaa ggcgtaaaat	180
aaagtcattc atcatttttt ctttgtacat gtttatttgt tctttttcaa ttacaccaag	240
cattactagt cagaaggaag cacttgctac ctcttgctct tcctctgect ctgggttgga	300
tcattttgat gacattgccc acattactca tgaaggatga caagattgca ctgtgcaatg	360
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<210> 47

<211> 261

<212> DNA

<213> Homo sapien

<400> 47

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gcaggattcg atgagattga gcaagatctt actcagagat ttgaagaaaa gctgcaggaa	180
ctagaaagtg tttccaggga tcccagcaat gagaatccta aacttgaaga cctctgcttc	240
atcttacaag aagagtacca c	261

<210> 48

<211> 701

<212> DNA

<213> Homo sapien

<400> 48

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acagcgtgtt ttagaagatt taaatttttt tcctgtctgc acaattagtt attcagagca	540
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tgagaaatta tgtgatctgt gtgtttgtgg aagagaattt tcaatatgta actacggagc	660
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<210> 49

<211> 270

<212> DNA

<213> Homo sapien

<400> 49

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tatggaaaata gatatttgt cagctcaatt tatgcagaga ttaaatgaca tcataatact	180
ggatgaaaac ttgcatagaa ttctgattaa atagtgggtc tgtttcacat gtgcagtttg	240
aagtatttaa attaaccact cctttcacag	270

<210> 50
 <211> 271
 <212> DNA
 <213> Homo sapien

<400> 50
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 acaataaaaa gttgaacatg cgcatatcta tgcatttcac agaagattag taaaactgat 180
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 tcttatcctt caaaataaaa ttccacacac t 271

<210> 51
 <211> 241
 <212> DNA
 <213> Homo sapien

<400> 51
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 aatggcttat cccaccgcc atgtaagtta ccatgcctgt ctctccctc ctacacattt 120
 ccagctcctg ctgcagttat tctacagaa gctgccattt accagccctc tgtgattttg 180
 aatccacgag cactgcaggc cctccacagc gttactacc agcaggcact cagctcttca 240
 t 241

<210> 52
 <211> 271
 <212> DNA
 <213> Homo sapien

<400> 52
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 tgcatgctgc ttgctgtaag ttacgatttg gcttcactag ctcaaatttt ttcactccac 180
 caaaagataa ggcacaggcc cgtttgtcca atcaagtttg ctgaaaatac tgcagcctga 240
 gtgtagacaa acttcccctg aatttgctag a 271

<210> 53
 <211> 493
 <212> DNA
 <213> Homo sapien

<400> 53
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 caatgagaaa atatgattha atggagtctg tcaataacct cacaatctcg ctgttccgag 180
 cagatagttt tcgtgccaac aggaactggc acatctagca gggtcacggc atgacctttt 240
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 agcttttgaa gttttcaagc attcctctcc agttgcctgt gggttggttct tgaacaccat 360
 ctccaacccc accacctcca gatgcaacct tgtctcgtga tacagacctg cccgggcggc 420
 cctcaagggc gaattctgca gatatccatc aactggcggc ccgctcgagc atgcatctag 480
 agggccaat tgc 493

<210> 54

<211> 321
 <212> DNA
 <213> Homo sapien

<400> 54
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 ctggtaagct tctgaggtga aggattcagg gacatctcgt ggaacaaaca ctccccactg 180
 gactttctct ctggagatac ccttttgaat atacaatggc cttggctcac taggtttaaa 240
 tacaacaag tctgaaacct actgaagact gagagattgc agcaatattc tctgaattag 300
 gatcggttc cataactcta a 321

<210> 55
 <211> 281
 <212> DNA
 <213> Homo sapien

<400> 55
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 gaacagccca ccttggttac agctagcaaa gatggttact tcaaagtatg gatattaaca 180
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<210> 56
 <211> 612
 <212> DNA
 <213> Homo sapien

<400> 56
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 aatggagctg ggaatatggc tggatatctg gtactaaaaa agggcttta agaacctact 420
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 gggcgccgt cg 612

<210> 57
 <211> 363
 <212> DNA
 <213> Homo sapien

<400> 57
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 acccaagaga gttgtgggag acaagatcac agctatgagc acctcgcac gtgtccagga 180
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cga

363

<210> 58
 <211> 750
 <212> DNA
 <213> Homo sapien

<400> 58
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 ctgcgccctt ctcccaactc gcgtgcctca cagaacccag gtgctgcaca gccccgagat 120
 gtggcccttc ttcaggaaag agcaaataag ttggtccaag tacttgatgc ttaaggaata 180
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 tggaggtcgc agatgaggac ctgcccgggc 750

<210> 59
 <211> 505
 <212> DNA
 <213> Homo sapien

<400> 59
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<210> 60
 <211> 520
 <212> DNA
 <213> Homo sapien

<400> 60
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<210> 61
 <211> 447
 <212> DNA
 <213> Homo sapien

<400> 61
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<210> 62
 <211> 83
 <212> PRT
 <213> Homo sapien

<400> 62
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 Phe Pro Val Ser Gln Asp Gln Glu Arg Glu Lys Arg Ser Ile Ser Asp
 20 25 30
 Ser Asp Glu Leu Ala Ser Gly Phe Phe Val Phe Pro Tyr Pro Tyr Pro
 35 40 45
 Phe Arg Pro Leu Pro Pro Ile Pro Phe Pro Arg Phe Pro Trp Phe Arg
 50 55 60
 Arg Asn Phe Pro Ile Pro Ile Pro Ser Ala Pro Thr Thr Pro Leu Pro
 65 70 75 80
 Ser Glu Lys

<210> 63
 <211> 683
 <212> DNA
 <213> Homo sapien

<400> 63
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 tttgaacgca tctttgtaaa tgt 683

<210> 64

<211> 749
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 534
 <223> n = A,T,C or G

<400> 64
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<210> 65
 <211> 612
 <212> DNA
 <213> Homo sapiens

<400> 65
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<210> 66
 <211> 703
 <212> DNA
 <213> Homo sapiens

<400> 66
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<210> 67
<211> 1022
<212> DNA
<213> Homo sapiens

```

```

<400> 67
cttgagaaaag caggattggt ttaagttcca agatttaaca aacttactgt tcagcatcat 60
attcaagcct aaaaggaaga taggattttc aagatatatt tccaacttct ttaacatggc 120
accatggatg aactgtttct cagcactgtg ctgcttcaact tggaattaag gatgaattgg 180
gaggagacag tatgacatag gtgggtaggt tgggtgggta ggggaaccag ttctaatagt 240
cctcaactcc actccagctg ttctgttcc acacggtcca ctgagctggc ccagtccctt 300
tcaactcagt tgtcaccaa ggcagcttca aggtcfaatg gcaagagacc acctataacc 360
tcttcacctt ctgctgcctc tttctgtctc cactgactgc catggccatc tgctatagcc 420
gcattgtcct cagtgtgtcc agggcccaga caaggaaggg gagccatggt gagactccaa 480
ttcccaggcc ttaatcctta accctagacc tggtgcctct agcatcattt atttatctac 540
ctaccttaata gctatctacc agtcattaaa ccatggtgag attctaacca tgtctagcac 600
ctgatgctag agataatatt gttgaatccc ttcaattata aacagctgag ttagctggac 660
aaggactagg gaggcaatca gtattattta ttcttgaaca ccatcaagtc tagacttggg 720
ggcttcatat ttctatcata atccctgggg gtaagaaatc atatagcccc aggttgggaa 780
ggggaaaacg gtttgcaaca ttctcctcct ttaggaggc gagctctgtc tcaactagcta 840
tgccccctca tcaattcacc ctatactcag atcagaagct gagtgtctga attacagtat 900
atttttctaaa ttctagccc ctgctgggtga atttgcctc ccccgctcct ttgacaattg 960
tccccgtgtt cgtctccggg cctgagact ggccctgctt atcttgtctga ccttcatcct 1020
ct 1022

```

```

<210> 68
<211> 449
<212> DNA
<213> Homo sapiens

```

```

<400> 68
ccagatccat tttcagtggg ctggatttct ttttattttc ttttcaactt gaaagaaact 60
ggacattagg ccactatgtg ttgttactgc cactagtgtt caagtgcctc ttgttttccc 120
agagatttcc tgggtctgcc agaggcccag acaggctcac tcaagctctt taactgaaaa 180
gcaacaagcc actccaggac aaggttcaaa atggttacaa cagcctctac ctgtcgcccc 240
agggagaaaag gggtagtgat acaagtctca tagccagaga tggttttcca ctcttctag 300
atattcccaa aaagaggctg agacaggagg ttattttcaa ttttattttg gaattaaata 360
cttttttccc tttattactg ttgtagtccc tcaattggat atacctctgt tttcacgata 420
gaaataaggg aggtctagag cttctattc 449

```

```

<210> 69
<211> 387
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature

```

<222> 22, 26, 36, 45, 54, 56, 62, 63, 73, 92, 98, 105, 155, 174,
194, 302, 312, 358, 375, 378, 381

<223> n = A,T,C or G

<400> 69

```
gcccttagcg tgggtcgcg cncgangtct ggagcntatg tgatncctat ggtncncagg 60
cnnatactgc tantctcatt tattctcctg cnacctantc ctctnctctg gaatcacacc 120
attattgcct gttaacactg gactgtgagt accangcaat taatttgcac caanaaagtt 180
gaggggtatta tcanatattg caatctgtac agagggaaga tgatttcaat ttgatttcaa 240
cttaaccttc atctttgtct gttaacacta atagagggtg tctaataaaa tggcaaattt 300
gngatctcat tnggtataac tacactcttt ttcacagatg tgatgactga atttccanca 360
acctgccccg gcggncgntc naagggc 387
```

<210> 70

<211> 836

<212> DNA

<213> Homo sapiens

<400> 70

```
tattccattt acaaaataaa ttcagccctg cactttcttt agatgccttg atttccagaa 60
tggagcttag tgctactgaa taccttgccc acagagccac ctcaggatat tcttttctcc 120
accctagttt atttatttat agatatctgt ttacaaagtc tgtagtaaat cctgatgctg 180
accatctgaa atgtactttt tttctgaatg ctgtttcaat ctaaaatagc agcttttgag 240
aaaacaatga tgtaaattcc ttatgataaa aggatgattc tataatattct ttaatgatat 300
taaatatgcc gaagccaagc acacagtctt tctaaagtgt gtgtatgttt gtgtgaatgt 360
gaatgatact gatcttatat ctgttaaaaag ttgttttaaa aagctgtggc atcccatgt 420
tcataatttg caagtcttct gttaaagatgt ctaggacgaa atattttatg tgctaattgca 480
tgtatttgta aaccagattt gtttaccact caaaattaac ttgttttctt catccaaaaa 540
agtttatttc ttccacgtac tttaaatttc tgtgtgggta taatatagct ttctaatttt 600
tttctttcac aaaggcaggt tcaaaattct gttgaaagaa aaatgctttc tgaaactgag 660
gtataacacc agagcttgct gtttaaagga ttatatgatg tacatcagtt ctataaatgt 720
gctcagcagt ttaacatgtg aatcctgttt taaagtgtct agatttcaac tgtgtaagcc 780
attgatataa cgctgtaatt aaaaatgttt atatgaaaaa aaaaaaaaaa aaaaaa 836
```

<210> 71

<211> 618

<212> DNA

<213> Homo sapiens

<400> 71

```
gttgacgtga gctcaagtgt tgggtgtatc agctcaaaac accatgtgat gccaatcatc 60
tccacaggag caatttgttt accttttttt tctgatgctt tactaacttc atctttttaga 120
tttaaatcat tagtagatcc tagaggagcc agtttcagaa aatatagatt ctagttcagc 180
accaccgta gttgtgcatt gaaataatta tcattatgat tatgtatcag agcttctggt 240
tttctcattc ttatttcatt tattcaacaa ccacgtgaca aacactggaa ttacaggatg 300
aagatgagat aatccgctcc ttggcagtggt tatactatta tataacctga aaaaacaaac 360
aggtaatttt cacacaaagt aatagatatc atgacacatt taaaataggg cactactgga 420
acacacagat aggacatcca ggttttgggg caatatgtga gactttttgg tggatgagat 480
atgcaggttg atrccagaag gacaacaaaa acatatgtca gatagaaggg aggagcaaat 540
gccaaagact ggagctgagg aagatcactg tgaaattcta tgtagtctag ttggctggat 600
gctagagcaa agaggtgg 618
```

<210> 72

<211> 806

<212> DNA
<213> Homo sapiens

<400> 72

```
tctacgatgg ccatttgctc attgtctttc ctctgtgtgt agtgagtgac cctggcagtg 60
tttgctgtgt cagagtggcc cctcagaaca acagggctgg ccttggaaaa accccaaaac 120
aggactgtgg tgacaactct ggtcaggtgt gatttgacat gagggccgga ggcgggttgct 180
gacggcagga ctggagaggc tgcgtgcccg gcactggcag cgaggctcgt gtgtcccca 240
ggcagatctg ggcactttcc caaccaggt ttatgccgtc tccagggaag cctcgggtgcc 300
agagtgggtg gcagatctga ccatcccccac agaccagaaa caaggaattt ctgggattac 360
ccagtcccc ttcaaccag ttgatgtaac cacctcattt ttacaaaata cagaatctat 420
tctactcagg ctatgggccc cgtcctcact cagttattgc gagtgttgct gtccgcatgc 480
tccgggcccc acgtggctcc tgtgctctag atcatgggtg cccccccc ctgtgggttg 540
aatcgatgcc acggattgca ggccaaattt cagatcgtgt ttccaaacac ccttgctgtg 600
ccctttaatg ggattgaaag cacttttacc acatggagaa atatatattt aatttgtgat 660
gcttttctac aaggctcact atttctgagt ttaatgtgtt tccaacactt aaggagactc 720
taatgaaagc tgatgaattt tcttttctgt ccaaacaagt aaaataaaaa taaaagtcta 780
tttagatgtt gaaaaaaaa aaaaaa 806
```

<210> 73
<211> 301
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 59
<223> n = A,T,C or G

<400> 73

```
actctggtaa gcttgttggt gtccaagtga agctccctca gatgaggcgt gttggccana 60
gagccattgt caacagcaga gatgctgttg aaactcaatc ccaacttagc caaattattc 120
agtcctttca ggctagctgc atcaactctg ctgattttgt tgccatcaag atgtaattcc 180
gtaagggaag gaggaagacc ttgaggaatg ctggygatat tgggatcagc aatgcggatg 240
tasgaagagc ttcttcmttc cctggaaagc cccattttca atyccttgag ctcttcakcg 300
g 301
```

<210> 74
<211> 401
<212> DNA
<213> Homo sapiens

<400> 74

```
agtttacatg atccctgtaa cagccatggt ctcaaactca gatgcttctt ccatctgcc 60
agtgtgttct ggatacagag cacatcgtgg ctctctgggt cacactcagc ttaggctgtg 120
ggtccacaga gcaatcatct ggctgggcta tgggtgggtg ggctctactc aagaagcaaa 180
gcagttacca gcacattcaa acagtgtatt gaacatctt taaatatcaa agtgagaaac 240
aagaaggcaa cataataatg ttatcagaaa gatgttagga agtaaggaca gctgtgtaaa 300
gcttgaggct gaaaagtagc ttgccagctt catctctttg gtttcttggg tagtgggccg 360
ccggaacagc aagatgtgag gttctgggtc atggatcata t 401
```

<210> 75
<211> 612
<212> DNA

<213> Homo sapiens

<400> 75

```

ttattttttca attttttatatt tggtttttctt acaaagggttg acatttttcca taacagggtgt 60
aagagtgttg aaaaaaaaaat tcaaattttt ggggagcgag ggaaggagtt aatgaaactg 120
tattgcacaa tgctctgatc aatccttctt tttctctttt gccacacatt taagcaagta 180
gatgtgcaga agaaatggaa ggattcagct ttcagttaaa aaagaagaag aagaaatggc 240
aaagagaaaag ttttttcaaa tttcttttctt ttttaattta gattgagttc atttatttga 300
aacagactgg gccaatgtcc acaaagaatt cctggtcagc accaccgatg tccaaagggtg 360
caatatcaag gaagggcagg cgtgatggct tatttgtttt gtattcaatg attgtctttc 420
cccattcatt tgtcttttta gagcagccat ctacaagaac agtgtaagtg aacctgctgt 480
tgccctcagc aacaagttca acatcattag agccctgtag aatgacagcc tttttcagggt 540
tgccagtctc ctcatccatg tatgcaatgc tgttcttgca gtggtagggtg atgttctgag 600
aggcatagtt gg 612

```

<210> 76

<211> 844

<212> DNA

<213> Homo sapiens

<400> 76

```

ggcttttcgag cggccgcccc ggcaggtctg atggttctcg taaaaacccc gctagaaact 60
gcagagacct gaaattctgc catcctgaac tcaagagtgg agaatactgg gttgacccta 120
accaaggatg caaattggat gctatcaagg tattctgtaa tatggaaaact ggggaaacat 180
gcataagtgc caatcctttg aatgttccac ggaaacactg gtggacagat tctagtgtctg 240
agaagaaaca cgtttggttt ggagagtcca tggatgggtg ttttcagttt agctacggca 300
atcctgaact tcctgaagat gtccttgatg tgcagcykgc attccttcga cttctctcca 360
gccagacttc ccagaacatc acatatcact gcaaaaatag cattgcatac atggatcagg 420
ccagtggaaa tgtaaagaag gccctgaagc tgatggggtc aaatgaagggt gaattcaagg 480
ctgaaggaaa tagcaaattc acctacacag ttctggagga tggttgcacg aaacacactc 540
gggaatggag caaaacagtc tttgaatata gaacacgcaa tgctgttcct tgacattgca 600
ccaccaatgt ccagaggtgc aatgtcaagg aacggcaggc gagatggctt atttgttttg 660
tattcaatga ttgtcttgcc ccattcattt gtctttttgg agcagccatc gactaggaca 720
gagtagggtga acctgctgtt gccctcagca acaagttcca catcgttgga accctgcaga 780
agcacagcct tgttcaarct gcccgctctc tcattccagat acctcggccg cgaccacgct 840
aatc 844

```

<210> 77

<211> 314

<212> DNA

<213> Homo sapiens

<400> 77

```

ccagtcctcc acttggcctg atgagagtgg ggagtggcaa gggacgtttc tcttgcaata 60
gacacttaga tttctctctt gtgggaagaa accacctgtc catccactga ctctctaca 120
ttgatgtgga aattgctgct gctaccacca cctcctgaag aggcttcctt gatgccaatg 180
ccagccatcc tggcatcctg gccctcgagc aggctgcggt aagtagcgat ctctgctcc 240
agccgtgtct ttatgtcaag cagcatcttg tactctgggt tctgagcctc catctcgcat 300
cggagctcac tcag 314

```

<210> 78

<211> 548

<212> DNA

<213> Homo sapiens

<400> 78

```

accaagagcc aagtgttaca caggatattt taaaaataaa atgttttttg aatcctcacc 60
tcccatgcta tcttctaaga taactacaaa tattcttcaa agatttaact gagttctgcc 120
aaggacctcc caggactcta tccagaatga ttattgtaaa gctttacaaa tcccaccttg 180
gccctagcga taattaggaa atcacaggca aacctcctct ctcgagagacc aatgaccagg 240
ccaatcagtc tgcacattgg ttttggttaga tactttgtgg agaaaaacaa aggctcgtga 300
tagtgcagct ctgtgcctac agagagcctc ccttttggtt ctgaaattgc tgatgtgaca 360
gagacaaagc tgctatgggt ctaaaacctt caataaagta actaatgaca ctcaagggtcc 420
tgggactctg agacagacgg tggtaaaacc cacagctgcg attcacattt ccaatttatt 480
ttgagctctt tctgaagctg ttgcttccta cctgagaatt cccattttaga gagctgcaca 540
gcacagtc

```

<210> 79

<211> 646

<212> DNA

<213> Homo sapiens

<400> 79

```

accccgtcac tatgtgaata aaggcagcta gaaaatggac tcaattctgc aagccttcat 60
ggcaacagcc catattaaga cttctagaac aagttaaaaa aaatcttcca ttcccatcca 120
tgcattggga aagggcttta gtatagttta ggatggatgt gtgtataata ataaaatgat 180
aagatatgca tagtggggga ataaagcctc agagtccttc cagtatgggg aatccattgt 240
atcttagaac cgagggattt gtttagattg ttgatctact aatttttttc ttcaattata 300
tttgaatttt caatgatagg acttattgga aattggggat aattctgttg tggattataa 360
taatattcat tttttaaaaa ctcatcttgg tattgagtta gtgcattgac ttccaatgaa 420
ttgacataag cccatatttc attttaacca gaaacaaaaa ctgaaaaatg ttactcccta 480
aataggcaac aatgtatttt ataagcactg cagagattta gtaaaaaaca tgtatagtta 540
ctttagaaac aacttctgac acttgagggt tacccaatgg tctccttccc attctttata 600
tgaggtaaat gcaaaccagg gagccaccga ataaacagcc ctgagt

```

<210> 80

<211> 276

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 16, 29, 32, 45, 53, 55, 58, 59, 65, 66, 75, 77, 85, 90, 97,
109, 112, 163, 170

<223> n = A,T,C or G

<400> 80

```

gtctgaatga gcttcnctgc gagatgganc ancataaccc agaantccaa aancntanng 60
aacgnnaaaa ccgntngaa caagnaaacn gcaactnacg gccgcctgnt gnagggcgag 120
gacgccacc tctcctcctc ccagttctcc tctggatcgc agncatccan agatgtgacc 180
tcttcagacc gccaaatccg caccaaggtc atggatgtgc acgatggcaa ggtgggtgtc 240
caccacgaa caggtccttc gcaccaagaa ctgagg

```

<210> 81

<211> 647

<212> DNA

<213> Homo sapiens

<400> 81

```

gtcctgcctt tcatcttttc tttaaaaaaa ataatgttt aaaaaacatt tccctcagat 60
tttaaaattc atggaagtaa taaacagtaa taaaatatgg atactatgaa aactgacaca 120
cagaaaaaca taaccataaa atattgttcc aggatacaga tattaattaa gagtgacttc 180
gtagcaaca cgtagacatt catacatatc cgggtggaaga ctggtttctg agatgcgatt 240
gccatccaaa cgcaaagtct tgatcttgga gtaggrtaat ggcccagga tcttgacagaa 300
gctctttatg tcaaaacttct caagttgatt gacctccagg taatagtttt caaggttttc 360
attgacagtt ggtatgtttt taagcttggt ataggacaga tccagctcaa ccagggatga 420
cacattgaaa gaatttccag gtattccact atcagccagt tcgttgtag ataaacgcag 480
atactgcaat gcattaaaac gcttgaaata ctcatcaggg atgttgctga tcttattgtt 540
gtctaagtag agagtttaga gagagacagg gagaccagaa ggcagtctgg ctatctgatt 600
gaagctcaag tcaaggtatt cgagtgtttt aagacctta aaagcag 647

```

<210> 82

<211> 878

<212> DNA

<213> Homo sapiens

<400> 82

```

ccttcttttc ccactcaatt cttcctgccc tgttattaat taagatatct tcagcttgta 60
gtcagacaca atcagaatya cagaaaaatc ctgcctaagg caaagaaata taagacaaga 120
ctatgatatc aatgaatgtg ggttaagtaa tagatttcca gctaaattgg tctaaaaaag 180
aatattaagt gtggacagac ctatttcaaa ggagcttaat tgatctcact tgttttagtt 240
ctgatccagg gagatcacc cctctaattat ttctgaactt ggttaataaa agtttataag 300
atttttatga agcagccact gtatgatatt ttaagcaa atgttattta aaatattgat 360
ccttcccttg gaccaccttc atgttagttg ggtattataa ataagagata caaccatgaa 420
tatattatgt ttatacaaaa tcaatctgaa cacaattcat aaagatttct cttttatacc 480
ttctcactg gccccctcca cctgcccata gtcaccaa tctgttttaa atcaatgacc 540
taagatcaac aatgaagtat ttataaaatg tatttatgct gctagactgt gggtaaatg 600
tttccatttt caaattattt agaattctta tgagtttaaa atttgtaaat ttctaaatcc 660
aatcatgtaa aatgaaactg ttgctccatt ggagtagtct cccaccta aaatcaagatg 720
gctatatgct aaaaagagaa aatatggtca agtctaaaat ggctaattgt cctatgatgc 780
tattatcata gactaatgac atttatcttc aaaacaccaa attgtcttta gaaaaattaa 840
tgtgattaca ggtagagaac ctcggccgcg accacgct 878

```

<210> 83

<211> 645

<212> DNA

<213> Homo sapiens

<400> 83

```

acaaacattt tacaaaaaag aacattacca atatcagtgg cagtaagggc aagctgaaga 60
ataaatagac tgagtttccg ggcaatgtct gtccctcaaag acatccaaac tgcgttcagg 120
cagctgaaac aggcttcttt cccagtgaca agcatatgtg gtcagtaata caaacgatgg 180
taaatgaggc tactacatag gccaggttaa caaactcctc ttctcctcgg gtaggccatg 240
atacaagtgg aactcatcaa ataattttaa cccaaggcga taacaacgct atttcccacg 300
taaactcatt taagccttca caatgtcgca atggattcag ttacttgcaa acgatcccgg 360
gttgtcatag agatacttgt ttttacacat aacgctgtgc catcccttcc ttactgccc 420
cagtcagggt tctgttgtgt ggaccgaaag ggggacatt ttagaaatgc ttccctcaag 480
acagaagtga gaaagaaagg agaccctgag gccaggatct attaaacctg gtgtgtgcgc 540
aaaagggagg gggaaggcag gaatttgaaa gataaaacgt ctcctttgcg ccgaggaatc 600
aggaagcgtg actcacttgg gtctgggacg ataccgaaat ccggt 645

```

<210> 84

<211> 301
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 270, 284
 <223> n = A,T,C or G

<400> 84
 tctgatgtca atcacaactt gaaggatgcc aatgatgtac caatccaatg tgaaatctct 60
 cctcttatct cctatgctgg agaaggatta gaaggttatg tggcagataa agaattccat 120
 gcacctctaa tcatcgatga gaatggagtt catgggctgg tgaaaaatgg tatttgaacc 180
 agataccaag ttttgtttgc cacgatagga atagctttta tttttgatag accaactgtg 240
 aacctacaag acgtcttggg caactgaagn ttaaatatcc acanggggtt attttgcttg 300
 g 301

<210> 85
 <211> 296
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 16, 20, 240
 <223> n = A,T,C or G

<400> 85
 agcgtgggtc gcggcncgan gtagagaacc gactgaaacg tttgagatga agaaagtctt 60
 cctcctgac acagccatct tggcagtggtc tgttggtttc ccagtctctc aagaccagga 120
 acgagaaaaa agaagtatca gtgacagcga tgaattagct tcagggtttt ttgtgttccc 180
 ttacccatat ccatttcgcc cacttccacc aattccattt ccaagatttc catgggtttan 240
 acgtaatttt cctattccaa tacctgaatc tgccccctaca actccccctt ctagcg 296

<210> 86
 <211> 806
 <212> DNA
 <213> Homo sapiens

<400> 86
 tctacgatgg ccatttgctc attgtctttc ctctgtgtgt agtgagtga cctggcagtg 60
 tttgcctgct cagagtggcc cctcagaaca acagggctgg ccttggaata accccaaaac 120
 aggactgtgg tgacaactct ggtcaggtgt gatattgacat gagggccgga ggoggttgct 180
 gacggcagga ctggagaggc tgcgtgcccc gcaactggcag cgaggctcgt gtgtcccca 240
 ggcagatctg ggcactttcc caaccaggt ttatgccgtc tccagggaag cctcgggtgcc 300
 agagtgggtg gcagatctga ccattccccac agaccagaaa caaggaattt ctgggattac 360
 ccagtcctcc ttcaaccag ttgatgtaac cacctcattt ttacaaaata cagaatctat 420
 tctactcagg ctaatggcct cgtcctcact cagtatttgc gagtgttgct gtccgcatgc 480
 tccggccccc acgtggctcc tgtgctctag atcatggtga cccccccgcc tgtgtggttg 540
 aatcgatgcc acggattgca ggccaaattt cagatcgtgt ttccaaacac ccttgctgtg 600
 ccctttaatg ggattgaaag cacttttacc acatggagaa atatatattt aatttgtgat 660
 gcttttctac aaggtccact atttctgagt ttaatgtgtt tccaacactt aaggagactc 720
 taatgaaagc tgatgaattt tcttttctgt ccaaacaagt aaaataaaaa taaaagtcta 780
 tttagatggt gaaaaaaaaa aaaaaa 806

<210> 87
 <211> 620
 <212> DNA
 <213> Homo sapiens

<400> 87
 tttttgcac acagtcgaaa tgtctgagag taatagtttc tgttgaattt ttttttgttc 60
 atttttctgc acagtcgatt ctgtttttat tactatctag gcttgaaata tatagtttga 120
 aattatgaca tccttcctct ttgttatatt cctcatgatt gctttggcta ttcaaagttt 180
 attttagttt catgtaaaatt tttgaattgt attttccatt attgtgaaaa tagtaccact 240
 gcaattttta taggaagttt attgaatcta tagattactt tggataatat ggcacttcaa 300
 taatattcat gttttcaatt catagacaaa atatttttaa atttatttgt atcttttcta 360
 atttttcctt tttttattgt aaagatttac ctctctggtt aatattttcc tcagaaattt 420
 attattttaag gtatagtcaa taaaattttc ttcctctatt ttgtcagata gtttaagtgt 480
 atgaaacat agatatactt gtatgttaat tttatatatt gctaatttac tgagtgtatt 540
 tattagttta gagaggtttt aatgtactgt ttatgggttt ttaaatataa gattacttat 600
 tttttaaaaa aaaaaaaaaa 620

<210> 88
 <211> 308
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 9, 189, 194, 206, 238, 296
 <223> n = A,T,C or G

<400> 88
 tagctgtgnt cagcaggccg aggttttttt tttttttgag atggagtctc gccctgtcac 60
 ccaggctgga gtgcagtggc ctgatctcag ctactgcaa gctccacctc ctggattcac 120
 gctattctcc tgccctcagcc tcccaagtag ctgggactac aggcgcccgc caccacgccc 180
 agctaattnt ttgnattttt agtacnagat gcggtttcat cgtgttagcc agcatggnet 240
 cgatctcttg acctcgtgaa ctgccgcgct cggcctccca aagacctgcc cgggenggcc 300
 gctcgaac 308

<210> 89
 <211> 492
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 448
 <223> n = A,T,C or G

<400> 89
 agcggccgcc cgggcaggtc tgttaagtaa catacatatc accttaataa aaatcaagat 60
 gaaatgtttt agaaactatt ttatcaaaaag tggctctgat acaaagactt gtacatgatt 120
 gttcacagca gcaactattaa tgccaaaaag tagacaaaac ctaaatgtcc attaaactgat 180
 aagcaaaatg tggatatatcc atacaatgga atattatgta gcccaacaac tggcatggag 240
 tactacaaca tggatgagcc tcaaaaacgt tatgctaaat gaaaaaagtc agatatagga 300
 aaccacatgt catatgatcc catttatatg aaatagccag aaaaggcaag tcatagaaac 360

```

aagatagatc ggaaaaatggg ttggaggact acaaattggca ccagggatct ttgaagttga 420
tggaaatggg ctaaaatcag actgtggntg tggttgaaca agtctgtaaa tttaccaaaa 480
tgcgttaata ca 492

```

```

<210> 90
<211> 390
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 106, 184, 206, 209, 234, 314
<223> n = A,T,C or G

```

```

<400> 90
tcgagcggcc gcccgggcag gtacaagctt tttttttttt tttttttttt ttttctaaca 60
gttctctgtt ttattgcaat acagcaaagt ctgggttaata ttaagngata tcaacataaa 120
gtattggtga ggagtccttt gtgacatttt ttaccatccc accttaaata tttctgtgca 180
aaanaatcca catcattggt tgggtancana ggatctotta aaaagttccc taanacactg 240
agggcataaa accaaacaaa ataaaataag gagtgatagg cttaaagcagt atcttcccct 300
ccatccacat ttgncaagca ttatatctta accaaaaaat gatcacacca ggccatgcaa 360
aactgtccaa tattaccgag aaaaaaccct 390

```

```

<210> 91
<211> 192
<212> DNA
<213> Homo sapiens

```

```

<400> 91
agcgtggtcg cggccgaggt ctgtcaatta atgctagtcc tcaggattta aaaaataatc 60
ttaactcaaa gtccaatgca aaaacattaa gttggtaatt actcttgatc ttgaattact 120
tccgttacga aagtccttca catttttcaa actaagctac tatatttaag gcctgcccgg 180
gcggcgcgtc ga 192

```

```

<210> 92
<211> 570
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 519, 559
<223> n = A,T,C or G

```

```

<400> 92
agcgtggtcg cggccgaggt ctgacaacta acaaagaagc aaaaactggc atcttggaca 60
tcctagtatt acacttgcaa gcaattagaa cacaaggagg gccaaaggaa aagtttagct 120
ttgaatcact tccaaatcta ctgattttga ggttccgcag tagttctaac aaaacttttc 180
agacaatggt aactttcgat taagaaagaa aaaaacccca aacatcttca ggaattccat 240
gccaggttca gtctcttcca gtgagccgcg ttgctaaaag tccacgtgca ccattaatta 300
gctgggctcg cagcaccatg taaaaagaag cctattcacc accaaccaca cagactagac 360
atgtaaagta ggatcaagta atggatgaca accatggtcg tggaatatgg tcaatgagag 420
tcagaaaagt acaggcacca gtacaagcag cagataacag aattgacggg ccaaaggata 480
aaaataggct tattttaata ggatgtaca gaacacatnc acttctaatt ggaagctgct 540

```

ttacactggg tggcattgna ccatatgcat

570

<210> 93

<211> 446

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 328, 389

<223> n = A,T,C or G

<400> 93

```
tgcgagcggcc gcccgggcag gtccagggtt ttatttagtt gtgtaatctt ggacaagtta 60
cctaactttt ttgagtctga atatatattaa tctgcaaaat gagaatcatg ataatacgtc 120
ataggcttaa ttaggaggat taaatgaaat aatttatagg tggtgccatg gttacatata 180
agtattagta gttaatctt ttcctttgtt tacttttata gtatagggtg gatgaagggt 240
ccagtatagg caaaaatact acttgggggg aaagtagagt gtgatacttt atttgaaatg 300
ttccctgaat ctgatcttta ctttttgnta ctgctgcact acccaaatcc aaattttcat 360
cccaacattc ttggatttgt gggacagcng tagcagcttt tccaatataa tctatactac 420
atcttttctt acttttgtgc tttttg                                     446
```

<210> 94

<211> 409

<212> DNA

<213> Homo sapiens

<400> 94

```
cgagcggccg cccgggcagg tccatcagct cttctgctta gaatacgagg cagacagtgg 60
agaggtcaca tcagttatcg tctatcaggg tgatgaccca agaaagggtga gtgagaagggt 120
gtcggcacac acgcctctgg atccacccat gcgagaagcc ctcaagttgc gtatccagga 180
ggagattgca aagcgccaga gccaacactg accatgttga aggcgttctc tccaggctgg 240
attcactgca ctcggaagaa ttctgcccag ggaatttagt gtgggggtac caggaccagt 300
ttgtcttgat cttgagaccc ccagagctgc tgcattcata ggggtgttgc ggactacacc 360
tggcctgcct tgcagtcatt ctttcttata tgttgaccca tttgcccac 409
```

<210> 95

<211> 490

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 486

<223> n = A,T,C or G

<400> 95

```
tgcgagcggcc gcccgggcag gtccactgtt tttgcagctt ccacacactg cacctaccta 60
ctacctctct tccatgctta actgggttta gaaagggtgag ctatgcgtag aagaactact 120
tgggatattc aagtgtctga ttgaacgat aagcctatag ataacagtct gaagctgcaa 180
gggagacttt gttagtacac tactataaac aggtaaacta cctgtttgta cttgatatag 240
tgcatatgaa atgactgatt taatacaaaa ctacagaaca tgcaaaattt tttctgagat 300
gttaagtatt acttcagtgg agaacaaaaa ttacttaacc tttcgctaag gcatgtagta 360
ccagaaagca aacatggttt tagcttctt tactcaaaat atgaacatta agtggttgtg 420
```

aattttgtct gccaaagtgg tcaaaaaata cattataaat aacctaagtt aaaaaaaga 480
aactgngaac 490

<210> 96
<211> 223
<212> DNA
<213> Homo sapiens

<400> 96
agcgtgggtcg cggccgaggt ctggaagccc accctaggac ttgaatggca ctttgcctt 60
tctctgccag taatgcaatc caacacaata tgctacaggg aaaacagaat ttccacgggtg 120
ccgccctctg gtacaaggga aacagcacgc aaagcaaaag gccacagagg gtcacctgag 180
aatccagtac aactaagcga ggacctgccc gggcggccgc tcg 223

<210> 97
<211> 527
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 404, 436, 451, 476
<223> n = A,T,C or G

<400> 97
tcgagcggcc gcccgggcag gtctgtgcag gagacactga agtgggtagt gtccataatc 60
tttttagcct gttgctgaaa ttccagttgt actccttcaa accaaaatgc ttacaggatc 120
atgggaaagc ctcggttgca gaaatcaaga caggcaagtg ggaagataac tcggctttga 180
ggttaaacag atctgggttc aaagcatagt ttactctct gtcttggtgaa gtgtcctggg 240
tgaagtcatt tcctctcttg aatttcagag aggatgaaaa tataaaaagt ataataacta 300
tcttcataat ctttgtgagg attaaagaag acgaagtgtg tgaaaagcta agcacagagc 360
aggcattcta caataagtag ttattatttt tggaaccatc ccgnccctag cccagccca 420
attaccttct cttagnctct tcatatcgaa ngccgtaatc ttgaccttct cttgcnactg 480
gattggtgct ggttgatgcc caaacttccc gagatgctgt ctgggaa 527

<210> 98
<211> 514
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 455
<223> n = A,T,C or G

<400> 98
tcgagcggcc gcccgggcag gtctggctcc catggccctt ggggtggcct gactctgtca 60
ctattcctaa aaccttctag gacatctgct ccaggaagaa ctttcaacac caaaattcat 120
ctcaatttta cagatgggaa aagtgattct gagaccagac cagggtcagg ccaaggtcat 180
ccagcatcag tggctgggct gagactgggc ccagggaacc ctgtctgctc ctctttttcc 240
cagagctgtg agttctctag ccaaggctgc actcttgagg gagagccagg aagcatagct 300
gaggccatga caacctcact cttcacctga aaatttaacc cgtggcagag gatccaggca 360
catataggct tcggagccaa acaggacctc ggccgcgacc acgctaagcc gaattccagc 420
acactggcgg ccgttactag tggatcccga gcttnggtac caagcttggc gtaatcatgg 480

gcatagctgg ttcttggggg gaaaatggta tccg

514

<210> 99

<211> 530

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 430, 522

<223> n = A,T,C or G

<400> 99

```
tcgagcggcc gcccgggcag gtctgaagaa acagggtataa atttggcagc cagtaatttt 60
gacagggaag ttacagcttg catgacttta aatatgtaaa ttgaaaata ctgaatttcg 120
agtaatcatt gtgctttgtg ttgatctgaa aaatataaca ctggctgtcg aagaagcatg 180
ttcaaaaata tttaattcac ttcaaaatgt catacaaatt atgggtggtt ctatgcaccc 240
ctaaagcttc aagtcattta gtcaggtac atactaaagt aatatattaa ttcttccagt 300
acagtgggtg ttcatacat tgacatttgc ataccctaga ataatttaag aaagacatgt 360
gtaatattca caatgttcag aaaagcaagc aaaagggtcaa ggaacctgct ttggttcttc 420
tgagatggg ctcatatcag cttcataaac attcattcta caaaatagta agctaaccat 480
ttgaaccca atttccagat taagcatatt ttctcataaa tnatgaagcc 530
```

<210> 100

<211> 529

<212> DNA

<213> Homo sapiens

<400> 100

```
agcgtggtcg cggccgaggt ccaggcacgg tggcttatgt gtgtaatccc agcacttggg 60
gaggctgagg gaggtggatc acttgagtc aggagtgtga gaccagtctg ggcaacatgg 120
cgaaacttca tcaactacca agaagaaaaa aattagccag gtgtggtggt gtatgcctgt 180
agtccagat actctggtgg ctgaggtgag aggatagctt gagcccagga aattgagggt 240
gcagtgaact atgattgcac tactgtgtct cagcttgggc aacagagtga gatcttgtct 300
ccaaaagtcc ttgaaggatt ttaggaagtt gttaaaagtc ttgaaacgat gtttgggggc 360
atgttagggt tcttgaatgt ttaattcctc taataactgc ttattcaaga gaagcatttc 420
tgactgggtg cggggcagtg gcttcatgcc ccataatccc agtactttgg gaggctgaag 480
caggaacatt gcttgagccc aggacttcaa gaacagcctg ggtaacata 529
```

<210> 101

<211> 277

<212> DNA

<213> Homo sapiens

<400> 101

```
tcgagcggcc gcccgggcag gtcgcaggaa gaggatggaa actgaggagt ccaggaagaa 60
gagggaacga gatcttgagc tggaaatggg agatgattat attttggatc ttcagaagta 120
ctgggattta atgaatttgt ctgaaaaaca tgataagata ccagaaatct gggaaggcca 180
taatatagct gattatattg atccagccat catgaagaaa ttggaagaat tagaaaaaga 240
agaagagctg agaacagacc tcggccgcga ccacgct 277
```

<210> 102

<211> 490

<212> DNA

<213> Homo sapiens

<400> 102

```
gcgtgggtcgc ggccgaggtc tgacggcttt gctgtcccag agccgcctaa acgcaagaaa 60
agtcgatggg acagttagag gggatgtgct aaagcgtgaa atcagttgtc cttaatTTTT 120
agaaagatTT tggtaaactag gtgtctcagg gctgggttgg ggtccaaagt gtaaggaccc 180
cctgccctta gtggagagct ggagcttgga gacattacc cttcatcaga aggaatTTTT 240
ggatgtTTTT ttgggaagct gttttgggtcc ttggaagcag tgagagctgg gaagcttctt 300
ttggctctag gtgagttgtc atgtgggtaa gttgaggtta tcttgggata aagggtcttc 360
tagggcacia aactcactct aggtttatat tgtatgtagc ttatatTTTT tactaagggtg 420
tcaccttata agcatctata aattgacttc tttttcttag ttgtatgacc tgccccgggc 480
ggccgctcga                                     490
```

<210> 103

<211> 490

<212> DNA

<213> Homo sapiens

<400> 103

```
gagcggccgc ccgggcaggt ccaaaccagc ttgtcctaa gtcattaacc aaatccatta 60
taggtaatTT gttcagttca atgtttacia ttcttatgga aaaaatttagc aacacacaca 120
tttaaaacgt gtgcatttac ctttgcgtag gtgcttaaaa tacatatTTc ttttcaaga 180
tgacatttaa aaattattct aatatatcag cagcaaaaat ataatttgca attacaaaaa 240
actaaactag aatccttaag ttattctcat gtttacagtt gtgattcttt aataaatact 300
attatgcagc tctattgttt aagctttctg gatttggttt aaacacatgc atatatattg 360
tcaattgtgg gaagctttac aagttatatt ccatgcactt tttggacaga gttctaacag 420
agccagccag tccacaaaaac aggcaagaca aaagttgaat taactggggc aaaataggac 480
tcttatgcaa                                     490
```

<210> 104

<211> 489

<212> DNA

<213> Homo sapiens

<400> 104

```
cgtgggtcgc gccgaggtcc aggttgggtct cgaactcctg accttgtgat ctgcccgcct 60
cgccctccca aagtgttggg attacaggca tgagccactg cgcccgaccg agttgaacat 120
ttaatgtcag actaggccag agttttctcaa tctttttatt ctcaattccc aaaggagccg 180
ttggagatTT tccoctcaat ctctctcctt catgaaatTT cataccacia atatagtatg 240
ttttatttat gtactgtgac cttttgaagg atcaciaaacc aatataatag tttttctttt 300
taacccgtca aggaccaagt ttttgcccct gttggaaatg cataaactgg actgatgaat 360
tggtatagat ggctttttatc atgaggatca gaaaaacttg aaattccttg gctacgacac 420
tccatatTTa tcaccgtata gggaggacct tggatatggg aagtagaaac acttctacac 480
tttacagca                                     489
```

<210> 105

<211> 479

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 142, 453

<223> n = A,T,C or G

<400> 105
 gcgtggctgc gcccgaggtc tgactggctt cagccccaga agttgagctg gccttttagac 60
 aaaataattg cacctccctc tgcctgcttat tcccttccgt ttttcatttg agtgtgaaca 120
 gttagataaa atctgtggct gncctcttcca ccttgcctta gtttccattg ctgtgagcag 180
 gccctcctat gcccgcatt tagctacaat gctgtggact cacttgattc ttttctccg 240
 agctttgtct agaaatatgt gaaggtgagg ttaagtgtt ctctgtgtag atccacttag 300
 ccctgtctgc tgtctcgatg ggcgttgctt cgtctctcct ctcttccatc ctttccattt 360
 gcttctcacc accttctggc ttcttttctt aatgcaataa aggcagtttc taacaaagaa 420
 agaatgtggg ctttggagtt agacagacct ggnnttaaat tctgcttctg gctctccaa 479

<210> 106
 <211> 511
 <212> DNA
 <213> Homo sapiens

<400> 106
 tcgcggccga ggtccaaaac gtggattcca atgacctgcc ttgagccgc ggttgccagg 60
 agttggacct gcagtagtat ggaagctca cggcctaaat accgactgcc ctctgacccc 120
 accgtccagc gattctagaa ctttctagt aggaaagaca tagcaaggga ttttcatgat 180
 tgggaaatac tgggagacaa gctgaagatt tgtaagggc tatgcttctg tcatctttta 240
 ggtattttaag gctactcctt tagctagcta ctttgagctg tttaaagtga ctatctccct 300
 acacagagtt acacaatgag catctctgaa agagaatatt accctggatt tccaaagatg 360
 tactctaaca ggatgaccag gcaaaagggtg acccgggga ggagtctgtt ataacactcg 420
 gaccacatg ttctcaaggc acttcagaac tttgggaaat cttttgtac cggatcctca 480
 gaaagcattt atggaaatac acatccttta g 511

<210> 107
 <211> 451
 <212> DNA
 <213> Homo sapiens

<400> 107
 ggccgcccgg gcaggtccag aatatcaaatt caaaagggtca caaatgttca ctctctctc 60
 caccctctta catattggat cttcaattgc aatagggagt gtaagatggg catttttagag 120
 acgtagttgc atcagcagaa gcaaaccat cttatacaaa tgggttttg ggataggaaa 180
 aggctgctaa aaattcacaa gtcaccattc cccagaagca atgaatagcc gtagaagacc 240
 aaggagatc aacaagtttc caaagtgtc aagccagaga tttggccctt ccaaaatacc 300
 accaggacgc ctggaccctg gggctctccg catgtcacca ctgactgcca ggatgctgct 360
 gcacctccct tcttgagac acaacagaga gacagtgaag tcaccaaga ctgggatcat 420
 cagaggctcc tcatgcttgc tacagagaag c 451

<210> 108
 <211> 461
 <212> DNA
 <213> Homo sapiens

<400> 108
 ccgcccgggc aggtcctgaa aacattcaga ctaatcaaaa tgggtactact gtaacttctt 60
 ataatacata atataaaagt ttttgaaaga tatagacaca attaaccctt aaacaacaca 120
 ctatctgatt ctcaaaagca atggctatctt aacaagatgt aaaaggacaa taacatatca 180
 aagaactttc acacacctaa agatagcatt tagcagcaag ttagtcagac aaaacaaaca 240
 caaatatttt cacatttcct atgtttgttt ttaactttac ttcataaagc cactgataat 300
 tgaggtttct ttcaagtata agatttctaa aattaaaaac tgtttttgac atatttttat 360

```

aaagaaataa aaagcaaaac gcaatccaac tatttatatg agtccctctt ctccaacagc 420
tttagatggg tttctgagta cttttttaca cagaatattt t 461

```

```

<210> 109
<211> 441
<212> DNA
<213> Homo sapiens

```

```

<400> 109
ggccgcccgg gcaggtctga ttataagaga aagaaatcca gtgacacgag ggcaggcagg 60
ccccgctctg ctctgatcga gaaaagcttc ctgatgtcag ggagatggaa ctgccaccat 120
cagaaccatg gcactttggg tgaaggtgtg tcagcgacca agggggcagg aaatgggcag 180
tgactaaggg ggcaggaaac aggcaggcac atggcaagggt tctcccagcc catcagccca 240
gtgatggcct cgattttgaa gctgcactac tgtctgaaaa gcacaattac tggtgactct 300
taacaaactt cagcatactg gggaaggaga ctgtcaagta actgaattgg aaagatgaaa 360
aagaaccatc tctaaaagtt gatgcttgtc agaagaataa cctcctttgt gcaagtcttg 420
caacatcttc attcaaccac a 441

```

```

<210> 110
<211> 451
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 260, 361
<223> n = A,T,C or G

```

```

<400> 110
ggtcgcggcc gaggtctggg gaaggggtga gaatccctgg gccttgccca gtcctgagct 60
ctgggtgtct gcagggaagc acagtgggtg gttagtgtta aagaaagcat ccagagaggt 120
aagaggggct tgggtagcac ctttgcctc tgtcacttcc gcaaaaactt cttgttgagg 180
aggaagatga gaaggttgac attgactttg gccttggtga agagtttcat gacagccaca 240
ccctcactct ggagctgcan gagatcctga tagtgaagct tgaaatcgct ccatgtccac 300
accaggaac ttggcattta cttcaaactt tcctgcctca tctcccgggc tgatgtcaaa 360
natgacgttt cttgaagtga gaggcgggaa agatcttcaa tttccaccaa agacaccctt 420
tttcaggaa gcttgagcaa caagtgtaat g 451

```

```

<210> 111
<211> 407
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 26, 33, 36, 79, 105, 111, 133, 149, 186, 206, 220, 239, 245,
259, 336, 375, 383, 393
<223> n = A,T,C or G

```

```

<400> 111
ggcgcagctt cgacctgact tctttngagc agntgncact acccgtcttg aggaatgccg 60
actgcagaca gtggcccang gcaaagagtg tgcgtcatcg atganattgg naagatggag 120
ctcttcagtc agnttttcat tcaagctgnt cgtcagacgc tgtctacccc agggactata 180
atcctnggca caatcccagt tcttanagga aagccactgn ctcttgtaga agaaatcana 240

```

```

cacanaaagg atgtgaacng tgtttaatgt caccaaggga aaacatgaaa ccaccttctg 300
ccagatatcg ggacgttgcg tgcagatcaa gcacgnaagt gaagacgcgt gcatttcctg 360
ccttcctgta acgantgccc agntcaagaa gancctgatg gaaccct 407

```

```

<210> 112
<211> 401
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 363
<223> n = A,T,C or G

```

```

<400> 112
tcgcggccga ggtcggccga ggtctgacat ctgttgctctg tgataaccac ttctgtattg 60
cgtcttaacc acttctgtat tgtgtggttt taactgccta aggcggaat gggcagtggg 120
cccccttccc ttaggatggg tatcaattca acaatatatta taaggcattt actgtgtgct 180
aagcatttg aagaccagg ctacaaaata agacatagtt cctgccctcc aggccagcag 240
agggaggcac aaataccag gaatctctga tgggtgtgaa gtgcggtcgt gggccacaga 300
aaatgaccgt catggagacc ctgctaaagg tcggaccctg agcccaaagg ggtattcaga 360
agnggagatg attttgcccc cactcataga tgggtggcaa a 401

```

```

<210> 113
<211> 451
<212> DNA
<213> Homo sapiens

```

```

<400> 113
gtcgcggccg aggtccatat taaaaagtcc atcataaaca aagactcctc ctcatgggat 60
gaatatgctc catatgcccc taatggtgca taacggactt agaaattcca atgagtctta 120
gggttgaat ttccaatgac ctgagcaagg cagctcccta tagcttctgg ataacatttt 180
acaccagag ttcaggctta aacagacctt tcaacacaat tattttcgga ttgtctgtct 240
agaaaacggc aatgctcaaa ggaatataaa taagggtggg gggacatatg cttccagcct 300
ggcctttctc catgtggtaa aaaacaatgg aatggctgtg ttaatttttt tttaatcttt 360
tctgaccttt actatgtttg gtaatggaaa taagtcaggg aaaacaaaat gaacagggtct 420
catcacttaa ttaatactgg gttttcttct t 451

```

```

<210> 114
<211> 441
<212> DNA
<213> Homo sapiens

```

```

<400> 114
ggccgccccg gcaggtoaat cctgtcagag atgggagaag tcacagacgg aatgatggat 60
acaaagatgg ttcaactttct tacacactat gctgacaaga ttgaatctgt tcatttttca 120
gaccagttct ctggtccaaa aattatgcaa gaggaaggct agcctttaa gctacctgac 180
actaagagga cactgttggt tacatttaat gtgcctggct caggtaacac ttaccctaa 240
gatattggag cactgctacc cctgatgaac atgggtgatt attctattga taaagccaaa 300
aagttccgac tcaacagaga aggcaacaaa aaagcagata agaaccgtgc ccgagtagaa 360
gagaacttct tgaaacttga cacatgtgca aagacaggaa gcagcacagt ctcggcgagg 420
ggaagaaaaa aagaacagag a 441

```

```

<210> 115

```

<211> 431
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 317
 <223> n = A,T,C or G

<400> 115
 gccgcccggg caggtccatt ggcggtgaca aaaggaaaag aagcaaagag actcagtcca 60
 taatgctgat tagttagaag aaagggctag gattgagaaa gtaccaggaa cttttaatta 120
 tttaaaagag aatgctgact gttaatgttt taaatcttac tgttcaaagt tactaatatg 180
 aattttttacc ctttgtgcat gaatattcta aacaactaga agacctccac aatttagcag 240
 ttatgaaagt taaacttttt attataaaaa ttctaaacct tactgtcctt ttaccaggaa 300
 catgacacac tatttancat cagttgcata cctcgccaat agtataattc aactgtcttg 360
 cccgaacaat catctccatc tggaagacgt aagccttttag aaacacattt ttctattaat 420
 ttctctagaa c 431

<210> 116
 <211> 421
 <212> DNA
 <213> Homo sapiens

<400> 116
 gtcgcggccg aggtccagaa atgaagaaga agtttgcaga tgtatttgca aagaagacga 60
 aggagagtg gtgtcaaate ttgacggca cagatgcctg tgtgactccg gttctgactt 120
 ttgaggaggt tggtcatcat gatcacaaca aggaaccggg gctcgtttat caccagttag 180
 gagcaggacg tgagcccccg cctgacacct ctgctgttaa acaccccagc catcccttct 240
 ttcaaaaagg atcctttcat aggagaacac actgaggaga tacttgaaga atttggattc 300
 agcccgcgaa gagatttate aagcttaact cagataaaat cattgaaagt aataaggtaa 360
 aagctaagtc tctaacttcc aggcccacgg ctcaagtga tttcgaatac tgcatttaca 420
 g 421

<210> 117
 <211> 489
 <212> DNA
 <213> Homo sapiens

<400> 117
 agcgtgggtcg cggccgaggt aaggctgcga ggttgtggtg tctgggaaac tccgaggaca 60
 gagggctaaa tccatgaagt ttgtggatgg cctgatgata cacagcggag accctgttaa 120
 ctactacgtt gacactgctg tgcgccacgt gttgctcaga cagggtgtgc tgggcatcaa 180
 ggtgaagatc atgctgccct gggacccaac tggtaaagatt ggccctaaga agcccctgcc 240
 tgaccacgtg agcattgtgg aacccaaaga tgagatactg cccaccaccc catctcaga 300
 acagaagggt gggaagccag agccgcctgc catgccccag ccagtcccca cagcataaca 360
 ggggtctcctt ggcagacctg cccgggcggc cgctcgaaag cccgaattcc agcacactgg 420
 cggccgttac tagtgatcc cagctcggtta ccaagcttgg cgtaatcatg gtcataagctg 480
 gtttcctgt 489

<210> 118
 <211> 489
 <212> DNA
 <213> Homo sapiens

<400> 118
 tcgagcggcc gcccgggcag gtattgaata cagcaaaatt ctatatacaa agtgacctgg 60
 acctgctgct tcaaaacatg atccttttctt actaatatct tgatagtcgg tccatagagc 120
 attagaaagc aattgactct taaataaaca gaaaagtgcc taatgcacat taaatgaatg 180
 gcctaactac tggaacttta gtagttctat aaggtgatta acataggttag gatccagttc 240
 ctatgacagg ctgctgaaga acagatatga gcatcaagag gccattttgt gcaactgccac 300
 cgtgatgccca tcgtgtttct ggatcataat gttcccatta tctgattcta gacacaccac 360
 aggaatatca gtggggtcag aggttagctt agctgcttgc tgggctagaa cagatatcac 420
 tccagcatgc tcctctgaca gggccccgcg gcaaccaga ttaagtcctt gtgaatctgt 480
 gcacaggga 489

<210> 119
 <211> 181
 <212> DNA
 <213> Homo sapiens

<400> 119
 taggttccag agacttttgg cccaggagga atatttactt ttagctctgg acatcattac 60
 aaaaaggaat atttcccaaa cctcttcaga ccgagaatac atgggtaaaa ttattaaata 120
 gttgtataat aaaaataatt ttttccttaa aaaaaaaaaa aacctcggcc gcgaccacgc 180
 t 181

<210> 120
 <211> 489
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 422, 487
 <223> n = A,T,C or G

<400> 120
 gcgtggctgc ggccgaggtc catttaaaac aaagaaaaat actaaagcca ctagtaaaca 60
 tctgatgtgc aaaatacaac atcctctagt tggctttatg ccattattac ataagctcca 120
 aatagctcat cttaaattaa aaagaaaaag tggctgtccc atctctgctg cataaatcag 180
 attttttttt aaaggtttag agtactttta ggaagggaag ttcaaaactg ccagtgaat 240
 tcacagagaa tacaaattta gcaatttaat ttcccaaagc tctttgaaga agcaagagag 300
 tctctcttct taatgcagtg ttctcccaag aggaactgta attttgcttg gtacttatgc 360
 tgggagatat gcaaaatgtg tttttcaatg tttgctagaa tataatggtt cctcttcagt 420
 gnctgggttca tcttggaact catgggttaa gaaggacttc ttggagccga actgcccggg 480
 cgggccntt 489

<210> 121
 <211> 531
 <212> DNA
 <213> Homo sapiens

<400> 121
 cgagcgcccg cccgggcagg tggccagcgc tgggtcccga gacgccgaga tggaggaaat 60
 atttgatgat gcgtcacctg gaaagcaaaa ggaaatccaa gaaccagatc ctacctatga 120
 agaaaaaatg caaactgacc gggcaaatag attcgagtat ttattaaagc agacagaact 180
 ttttgacat ttcatccaac ctgctgctca gaagactcca acttcacctt tgaagatgaa 240

```

accagggcgc ccacgaataa aaaaagatga gaagcagaac ttactatccg ttggcgatta 300
ccgacaccgt agaacagagc aagaggagga tgaagagcta ttaacagaaa gctccaaagc 360
aaccaatggt tgcaactgat ttgaagactc tccatcgtat gtaaaatggg gtaaactgag 420
agattatcag gtcccgagga ttaaactggc tcatttcttt gtatgagaat ggcatcaatg 480
gtatccttgc agatgaaatg ggcctaggaa agactcttca acaatttctc t 531

```

<210> 122

<211> 174

<212> DNA

<213> Homo sapiens

<400> 122

```

tcgagcggcc gcccgggcag gtctgccaac agcagaggcg gggcctccgg catcttcaaa 60
gcacctctga gcaggctcca gccctctggc tgcgggaggcg gtctgggggc tcctctgagc 120
tcggcgagcaa agcagatggt atttctctcc cgcgacctcg gccgcgacca cgct 174

```

<210> 123

<211> 531

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 152, 373, 482, 494, 496, 502

<223> n = A,T,C or G

<400> 123

```

agcgtggctg cggccgaggt cctcaaccaa gagggttgat ggcctccagt caagaaactg 60
tggetcatgc cagcagagct ctctectcgt ccagcaggcg ccatgcaagg gcaggctaaa 120
agacctccag tgcattcaaca tccatctagc anagagaaaa ggggcactga agcagctatg 180
tctgccaggg gctaggggct cccttgcaaga cagcaatgct acaataaagg acacagaaat 240
gggggaggtg ggggaagccc tatttttata acaaaagtcaa acagatctgt gccgttcatt 300
ccccagaca cacaagtaca aaaaaaccaa tgcttggtgt ttctgccaag atggaatatt 360
cctccttccct aanttccaca catggccggt tgcaatgctc gacagcattg cactgggctg 420
cttggtctctg tgggtctgggc accagtagct tgggccccat atacacttct cagttcccac 480
anggcttatg gccnangggc angctccaat tttcaagcac cacgaaggaa g 531

```

<210> 124

<211> 416

<212> DNA

<213> Homo sapiens

<400> 124

```

tcgagcggcc gcccgggcag gtccatctat acttttctaga gcagtaaattc tcataaaattc 60
acttaccaag cccaggaata atgactttta aagccttgaa tatcaactaa gacaaaattat 120
gccaatctctg atttctcaca tatacttaga ttacacaaaag ataaagcttt agatgtgatc 180
attgtttaat gtagacttat ctttaaagtt tttaattaaa aactacagaa gggagtaaac 240
agcaagccaa atgatttaac caaatgattt aagagtaaaa ctactcaga aagcattata 300
cgtaactaaa tatacatgag catgattata tacatacatg aaactgcaat tttatggcat 360
tctaagtaac tcattttaagt acatttttgg cattttaaaca aagatcaaat caagct 416

```

<210> 125

<211> 199

<212> DNA

<223> n = A,T,C or G

<400> 128

```
cgtggtcgcg gccgaggtgc tttttttttt tttttttttt tttttttttt tgctgattta 60
ttttttctnt ttattgttac atacaatgta taaacacata aaacanaaaa cagtagggat 120
cctctaggat ctctagggan acagtaaagt anaaagaggt ctcanaaaaca tttttttaaa 180
gtacaagaca ttcagnctc ggcccaaagg cgtaaaagggt ttanagccag canatagctg 240
nactaaaggc tccgtctntn tccccanagc caggacaacc ccagggagct ntccattagc 300
agccagtcca cgcaggcagg atgctgcgga aaaagctcta tgctganaac attccccttg 360
atggaaagaa gggcaacaca aaaggggtaa ctaanagctc ctctctctcg tgagggcgac 420
aactgaggaa cagaaaagga gtgtcccatg tcaactttga cccctccc 469
```

<210> 129

<211> 419

<212> DNA

<213> Homo sapiens

<400> 129

```
gcgtggtcgc gccgaggtc tgattttcat ttaaataattt cagagctata gcatttgcct 60
ccatgctcaa atccacacca ttggggctta agccgctcat gccaacatta gcaaattgaca 120
tgcagtttaa tccagagatc actgcttctg ggctgatgca tgccaacaca ctggcgatgat 180
ccacgttatg tgcatttttc ttcaacttag tgggagaatc aatttttact ccaaggcttc 240
ttagttgctt aagagttgca ttaaggacac aatctttgtc caccagtctt gaatgatgtg 300
tttttttctt tgtatggtaa acgttttggg ttctggtgca ttcattgactg ataattactg 360
ctttggtaga cggctgctca agtttccttg gaggaactat ttaatagggtg gggtacttg 419
```

<210> 130

<211> 354

<212> DNA

<213> Homo sapiens

<400> 130

```
agcgtggtcg cggccgaggt ccatctgagg agataaccac atcactaaca aagtgggagt 60
gaccccgagc agcacgctgt ggaattccat agttggtctc atccctggtc agtttccaca 120
tgatgatggt cttatctcga gaggcggaga ggatcatgtc cggaactgc ggggtagtag 180
cgatctgggt taccagccg ttgtggcct tgagggtgcc acgaagggtc atctgctcag 240
tcattggcgc ggcgagagcg tgtgtcgtg cagcgacgag gatggcactg gatggcttag 300
agaaactagc accacaacct ctctgccgc acctgcccg gcggcccgct cgaa 354
```

<210> 131

<211> 474

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 421

<223> n = A,T,C or G

<400> 131

```
cgagcggcgc cccgggcagg tctggcagca gcttcctctg gaataattga cagctttgtg 60
ctgcctgact aaaatttgaa atgacaaccg ctgaatgtaa aatgatgtac ctacaatgag 120
agagatttag gaatactatc tgtcaatcca tagatgtaga aacaaaacaa actacagaat 180
gaaaacaaac ttatttttaa ccaaagaaac aaatgtatcc aaaatatagt ccatgatata 240
```

```

tttgattact agtataacca cagttgaaaa cttaaaaaaa aaaattgaca ttttttghtaa 300
tgggtactaa tggatttata aaaggtttct gtttccaaag atgttattgg ggtccacata 360
ttccttgaag acttcagcat cccaaagccc gacatcagag atactttcct ttagccattg 420
nttcccgtaa cttgcccact ccatggtgat gtgacaggct tcccttcatt agca 474

```

<210> 132

<211> 474

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 403

<223> n = A,T,C or G

<400> 132

```

ggccgaggtg gggaattcat gtggaggtca gagtggaaag aggtgtgaga ggggtccagca 60
gaaggaaaca tggctgccaa agtgtttgag tccattggca agtttggcct ggccttagct 120
gttgaggag gctgtgtgaa ctctgcctta tataatgtgg atgctgggca cagagctgtc 180
atctttgacc gattccgtgg agtgcaggac attgtggtag gggaaggagac tcattttctc 240
atcccggtggg tacagaaacc aattatcttt gactgccgtt ctgaccacg taatgtgcca 300
gtcatcactg gtagcaaaga ttacagaat gtcaacatca cactgcgcac cctcttcccg 360
cctgtcgcca gccagcttcc tcgcatcttc accagcatcg ganaggacta tgatgaaccg 420
tgtgtcgccg tccatcacia ctgagatcct caagtcagtg gtggctcgct ttga 474

```

<210> 133

<211> 387

<212> DNA

<213> Homo sapiens

<400> 133

```

tgctcgagcg gccgccagtg tgatggatat ctgcagaatt cggcttagcg tggtcgcggc 60
cgaggtctgc gggcccttta gcctgccctg cttccaagcg acggccatcc cagtagggga 120
ctttcccaca ctgtgccttt acgatcagcg tgacagagta gaagctggag tgcctcacca 180
cacggcccgg aaacagcggg aagtaactgg aaagagcttt aggacagctt agatgccgag 240
tggggaatg ccagaccaat gataccaga gctacctgcc gccaaacttg tgagatgtgt 300
gtttgactgt gagagagtgt gtgtttgtgt gtgtgttttg ccatgaactg tggccccagt 360
gtatagtgtt tcagtggggg agaactg 387

```

<210> 134

<211> 401

<212> DNA

<213> Homo sapiens

<400> 134

```

ggccgcccgg gcaggtctga tgaagaacac ggggtgtgatc cttgccaatg acgccaatgc 60
tgagcgggctc aagagtgttg tgggcaactt gcatcggtcg ggagtcacca acaccattat 120
cagccactat gatgggcgcc agttcccaa ggtgggtggg ggctttgacc gactactgct 180
ggatgctccc tgcagtggca ctggggtcat ctccaaggat ccagccgtga agactaacia 240
ggatgagaag gacatcctgc gcttgtgtct acctccagaa ggaagtgtct cctgagtgtc 300
attgactctt gtcaatgcga ccttcaagac aggaggctac ctggtttact gcacctgttc 360
tatcacagtg agacctctgc catggcagaa caggggaagc t 401

```

<210> 135

<211> 451
 <212> DNA
 <213> Homo sapiens

<400> 135
 ggtcgcggcc gaggtctgtt cctgagaaca gcctgcattg gaatctacag agaggacaac 60
 taatgtgagt gaggaagtga ctgtatgtgg actgtggaga aagtaagtca cgtggggcct 120
 tgaggacctg gactgggtta ggaacagttg tactttcaga ggtgaggtgt cgagaaggga 180
 aagtgaatgt ggtctggagt gtgtccttgg ccttggctcc acaggggtgt ctttcctctg 240
 gggccgtcag ggagctcatc ccttgtgttc tgccagggtg gggtaaccgg gtttgacact 300
 gaggagggtg acctgctggc tggagcggca gaacagtggc cttgatttgt cttttggaag 360
 attttaaaaa ccaaaaagca taaacattct ggtccttcac aatgctttct ctgaagaaat 420
 acttaacgga aggacttctc cattcaccat t 451

<210> 136
 <211> 411
 <212> DNA
 <213> Homo sapiens

<400> 136
 ggccgcccgg gcaggtctga atcacgtaga atttgaagat caagatgatg aagccagagt 60
 tcagtatgag ggttttcgac ctgggatgta tgtccgcgtt gagattgaaa atgttccttg 120
 tgaatttgtg cagaactttg acccccttta cccattatc ctgggtggct tgggcaacag 180
 tgagggaat gttggacatg tgcagggtgg tccctttgct gcgattttgg tgcctgaggc 240
 tctgtggatt tcccctccat caatcatctt accctctcat cccctcaga tgcgtctgaa 300
 gaaacatctc tggataaga aaatcctcaa gtcccaagat ccaatcatat tttctgtagg 360
 gtggaggaag tttcagacca tctgtctcta ttatatccga agaccacaat g 411

<210> 137
 <211> 211
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 186
 <223> n = A,T,C or G

<400> 137
 cggccgcccg ggcaggtcgg ttggtgcggc ctccattggt cgtgttttaa ggogccatga 60
 ggggtgacag aggccgtggt cgtggtggc gctttggttc cagaggaggc ccaggaggag 120
 ggttcaggcc ctttgacca catatcccat ttgacttcta tttgtgtgaa atggcctttc 180
 cccgntcaa gccagcacct cgtgaaact t 211

<210> 138
 <211> 471
 <212> DNA
 <213> Homo sapiens

<400> 138
 gccgcccggg caggtctggg ctggcgactg gcattccaggc cgtaactgca aatctatgct 60
 aggcggggtc tcccttctgt gtgttcaagt gttctcgact tggattotta actattttaa 120
 aaaatgcact gagtttgggt taaaaaccaa ccacaaaat ggatttcaac acagctctaa 180
 agccaagggc gtggccggct ctcccaacac agcgactcct ggaggccagg tgcccatggg 240

```

cctacatccc ctctcagcac tgaacagtga gttgattttt cttttttacaa taaaaaaaagc 300
tgagtaatat tgcataaggag taccaagaaa ctgcctcatt ggaaacaaaa actattttaca 360
ttaaataaaa agcctggccg caggctgcgt ctgccacatt tacagcacgg tgcgatgcac 420
acggtgacca aaccacggag gcaagcttct ggcactcaca ccacgaccg c 471

```

```

<210> 139
<211> 481
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 384
<223> n = A,T,C or G

```

```

<400> 139
gtcgcggccg aggtctgttc tttagctcag atttaaacct gctgtctctt ctttatttgc 60
agaatgaatt cccagttcct gagcagttca agaccctatg gaacgggcag aagttgggtca 120
ccacagtgcac agaaattgct ggataagcga agtgccactg ggttctttgc cctcccttca 180
caccatggga taaatctgta tcaagacggg tcttttctag atttctctta cctttttgct 240
cttaaaactg cttctctgct ctgagaagca cagctacctg ccttctactga aatataacct 300
aggctgaaat ttgggggtggg atagcaggtc agttgatctt ctgcaggaag gtgcagcttt 360
tccatatcag ctcaaccacg ccgncagtcc attcttaagg aactgcgcac taggactgat 420
gatgcatttt agcttttgag cttttggggg gtattctacc aaccaacagt ccatttggaa 480
a 481

```

```

<210> 140
<211> 421
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 372
<223> n = A,T,C or G

```

```

<400> 140
gtcgcggccg aggtttccca ttttaagaaa atagatcttg agattctgat tctttttccaa 60
acagtcccct gctttcatgt acagcttttt ctttacctta cccaaaattc tggccttgaa 120
gcagttttcc tctatggctt tgcctttctg attttctcag aggctcgagt ctttaatatata 180
accccaaatg aaagaaccaa ggggaggggt gggatggcac ttttttttgt tgggtcttgtt 240
ttgttttgtt ttttggttgg ttgggttccg ttatttttta agattagcca ttctctgctg 300
ctatttccct acataatgtc aatttttaac cataattttg acatgattga gatgtacttg 360
aggctttttt gntttaattg agaaaagact ttgcaatttt ttttttagga tgagcctctc 420
c 421

```

```

<210> 141
<211> 242
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 4, 6, 20, 31, 35, 39, 72, 94, 141, 142, 211, 222

```

<223> n = A,T,C or G

<400> 141

```
cgantngccc gcccgggcan gtctgtctaa nttntncang gaccacgaac agaaactcgt 60
gcttcaccga anaacaatat cttaaaccatc gaanaattta aatattatga aaaaaaacat 120
tgcaaaatat aaaataaata nnaaaaggaa aggaaacttt gaaccttatg taccgagcaa 180
atccaggtct agcaaacagt gctagtcccta nattacttga tntacaacaa cacatgaata 240
ca 242
```

<210> 142

<211> 551

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 15, 19, 32, 73, 110, 278, 405, 436, 473, 510

<223> n = A,T,C or G

<400> 142

```
agcgtggctcg cggcncgang tccacagggc anatattctt ttagtgtctg gaattaaaat 60
gtttgaggtt tangtttgcc attgtctttc caaaaggcca aataattcan atgtaaccac 120
accaagtgca aacctgtgct ttctatttca cgtactgttg tccatacagt tctaaataca 180
tgtgcagggg attgtagcta atgcattaca cagtcgttca gtcttctctg cagacacact 240
aagtgatcat accaacgtgt tatacactca actagaanat aataagcttt aatctgaggg 300
caagtacagt cctgacaaaa gggcaagttt gcataataga tcttcgatca attctctctc 360
caaggggccc gcaactaggc tattattcat aaaacacaac tgaanagggg attggtttta 420
ctggtaaate atgtgntgct aaatcatttt ctgaacagtg ggggtctaat cantcattga 480
tttagtggca gccacctgcc cggcggccgn tcgaagccca attctgcaga tatccatcac 540
actggcggcc g 551
```

<210> 143

<211> 515

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 5, 286, 498

<223> n = A,T,C or G

<400> 143

```
cgagngggccc gcccgggcag gtatcttcac aaactcaaca aaggcactac atgagacttc 60
acattcccct agtccaatag ctgacaaatt ttgcaacgt tctgcaatgc gaattaactc 120
ttcatcaagt ggccgtaatc catttgacac cactactagt tcaaccagtc tagggcatgt 180
cattcccaca cggccaagca catctttgct tactgatctc ccaaagtaca gatgggtggc 240
aggattttca tagcgaaaga aggggtcaaa ttcttcttca tataanaaaa aatacatcac 300
taagttcact ttgggtgaat gtctgatgaa agcatcccag ctactcttct gaatagtatg 360
gaagtgtgtc tgtccaggat tctcactgac tacatcaatg cgcaaagtgt ctaatcgaac 420
atgtttttca gaagacaatg caagtaacaa ctcatcactc aataagtggt aagttcaggg 480
ctagttctct taagccgnga cactgatcag cacac 515
```

<210> 144

<211> 247

<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 11, 20, 42, 115, 152, 165, 181, 195, 208, 221
<223> n = A,T,C or G

<400> 144
tgcattctct ntggatgcan acctgcccgt tggtagggac tntgctcaca cggaacatgg 60
acggttacac ctgtgccgtg ggtgacgtcc accagcttct ggatcatctc ggcgnggggtg 120
ttgtggaagg gcagactatc cacctccatg cncacgatgc ccganacgcc actccggact 180
ntgtgctgca ccaanatgcc cagcattnta tcttcaagca naggacttat cagggtcctt 240
ggcacac 247

<210> 145
<211> 309
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 18, 155, 247
<223> n = A,T,C or G

<400> 145
cgtgggtcgc ggcccgangt ctgctgtaac aaaacaccat agtctgggca gctcatagac 60
aatggaattt tatttctcac gcttctggag gctggattcc aagatcaagg ttccaggaga 120
ctcagtgtct ggcaaggctc cggtttctgc ctcanagatg gtgccatctg gctgtgtcct 180
cacaagtagg aaggtgcaag aagctccctc caggctctgt ctgtaagaca ctgatcccat 240
tcatgaggg gaaacgtaat gacctaatca gccccagag accccacttc taacaccatc 300
accttgggg 309

<210> 146
<211> 486
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 16, 97, 154, 244, 275, 322, 347, 349, 352, 357, 449, 460,
472
<223> n = A,T,C or G

<400> 146
agcgtgggtc gcggcncgac gtcctgtcca tatttcacag cccgagaact aatacaagat 60
gctgacatca tattttgtcc ctacaactat cttctanatg cacaataag ggaaagtatg 120
gatttaaatc tgaaagaaca ggttgtcatt ttanatgaag ctcataacat cgaggactgt 180
gctcggggaat cagcaagtta cagtgttaaca gaagttcagc ttcggtttgc tcgggatgaa 240
ctanatagta tggtaacaa taatataagg aaganagatc atgaaccctc acgagctgtg 300
tgctgtagcc tcattaattg gntagaagca aacgctgaat atcttgnana angagantat 360
gaatcagctt gtaaaatatg gagtggaaat gaaatgctct taactttaca caaaatgggt 420
atcaccactg ctacttttcc cattttgcng gtaagatatn ttttctacct gngaaacgta 480
tttaag 486

<210> 147
 <211> 430
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 13, 26, 28, 289, 299, 352, 390, 399
 <223> n = A,T,C or G

<400> 147
 gccgcccggg cangttcgac attacntnga gttccatgat gtacaattct ttcacgaaaa 60
 acaatgaatg caagaatttg aggatctcct tactcctccc ttttacagat ggtctctcaa 120
 tccctttcttc ttctcttcca tcttcatctt cttctgaacg cgctgccggg taccacggct 180
 ttctttgtct ttatcgtgag atgaaggtga tgcttctgtt tcttctacca taactgaaga 240
 aatttcgctg caagtctctt gactggctgt ttctccgact tcgcctttnt gtcaaacgng 300
 agtcttttta cctcatgccc ctcagcttca cagcatcttc atctggatgt tnatttctca 360
 aagggtcac tgaggaaact tctgattcan atgtcgaana gcaactgtgaa gttttctctt 420
 cattttgctg 430

<210> 148
 <211> 483
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 20, 24, 53, 55, 374, 381, 423, 431, 459
 <223> n = A,T,C or G

<400> 148
 cccgggcagg tctgtgttgn tttncaacgg gtgtcctccc cagcgtccag aananggaaa 60
 tgtggagcgg gtgatgatga cccctcgtg tcctgtcacc tcctgcacag ctctgtatgt 120
 gggctctggc tgggaccacc cgtacagggt gtgcacgttg tagtgctcca cgggggagct 180
 gtccggcagg atctgctgac tctccatgca cagagtcttg ctgctcaggc ccttgctcct 240
 agattccaaa tatggcatat aggggtgggt tatttagcat ttcatgtctg cagccctga 300
 cagatccatc cacaaaattt gatggctcat tcatatcaat ccacaatcca tcaaacttca 360
 agctcttctc tggntctcga nggtttgcat agaactcttc tatctctttc ttccaccacg 420
 canacctcgg ncgcgaccac gctaagccga attctgcana tatccatcac actggcgggc 480
 gct 483

<210> 149
 <211> 439
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 11, 359, 384, 402
 <223> n = A,T,C or G

<400> 149
 ctttcacgaa nacaatgaat gcaagaattt gaggatctcc ttactcctcc cttttacaga 60


```

tggctctctca atcccttctt ctctctcttc atcttcatct tcttctgaac gcgctgccgg 120
gtaccacggc tttctttgtc tttatcgtga gatgaagggt atgcttctgt ttcttctacc 180
ataactgaag aaatttcgct gcaagtctct tgactggctg tttctccgac ttgcctttt 240
tgcaaacgtg agtcttttta cctcatgccc ctgagcttcc acagcatctt catctggatg 300
ttcatttctc aaagggctca ctgaggaaac ttctgactca catgtcgaag aagcactgng 360
agtttctctt catttgctgc aaanttgtct tttgctggct gngctctcag accacccatt 420
tggctgcatg ggggctgac                                     439

```

```

<210> 150
<211> 578
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 4, 15, 260, 336, 371, 430, 461, 535, 572
<223> n = A,T,C or G

```

```

<400> 150
ggcncgcccc ggcangtcca ctccactttt gagctctgag ggaatacctt caggaggggac 60
agggtcaggg agtcttgcca gctccgcagc agagattcac attcattcag agacttggtg 120
tccagtgaac tgccattgat cgcaacgac ctgtctccca cagcaaggga cccttcttta 180
gcggcagggc ttccaggcag cacagcggca gcatacactc cattctccag actgatgcca 240
ctgtctttct gtccactgan gttgatgtgc agcggcgtga ccaccttccc acccagggac 300
ttcctccgcc gcacgaccat gttgatgggc cccctnccca ttgaggagcg ccttgatggc 360
ctgcttcttg nccttggtga tgaagtccac atcgggtgatt ctacacagcca gtcattgacc 420
cttaagcggg catcagcaat gcttcctttg gccactttag ngacaaatat gccacagtcc 480
ccgggaaaca agggtcattc acaccttctg gcatacaaaa cacctcgggc gggancacta 540
agccgaattc tgcagatata catcacactg gngggccg                                     578

```

```

<210> 151
<211> 503
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 392, 464
<223> n = A,T,C or G

```

```

<400> 151
cgagcggccc gcccgggcag gtctgggaga tcagcgactg ctgccacgtg ccagagaaatg 60
gctcgtcctt tcaactacagc ggaatgcaat gaggggtgggt gagaagatga tgggtcgggt 120
atttcattcc ttttcttttt acaacttcac tttcagagac ttcagcgttc catgtctgct 180
gtgctgtgga acccagagtg ctcttgcttg gatggctgag aatcccttgg accctggaag 240
cacctactcc atgatggccc ggtatagtgc aggtcaata taatcttccc ggtatcttga 300
gttgataact cgttgccggt tcttttcttg cttaacctct ttctctgtga aaatctcatt 360
gaagcgcagt tctgaagcta ctgacagtct anatttgact ctcttgggaa gctcttcata 420
cagtgtgtat acatcatctc tcttaaccac aagttggagc catncttaaa cttcacctgg 480
tacatttggg taggggtggga ggc                                     503

```

```

<210> 152
<211> 553
<212> DNA

```

<213> Homo sapiens

<220>

<221> misc_feature

<222> 293, 432, 459, 481, 536

<223> n = A,T,C or G

<400> 152

```
agcgtggctcg cggcccgagg tccactgagc tccgccttcc ccgggctccc tgaggaagca 60
gagtcctgac ttccaggaag gacaggacac agaggcaaga actcagcctg tgaggctctg 120
ggtggctcct gaggccagag gacgccttcc gcgatccatg gctcagcatc gtccctcttg 180
cttcccagcc ccgggcccga cgttcgggtt aataagcaga gcagttattc ggctcctggc 240
aggagctccc ccgttagttt ccacgttggt agcacattca tacttaagac tgnttctctt 300
tgtgttttaa gcgtctgtct ctgtagtaaa ctgaaatgtt aacagaaatg cagacctgcc 360
cgggcgggcg ctcgaaagcc gaattctgca gatatccatc acactggcgg ccgctcgagc 420
atgcacttag anggcccaat tcgccctata gtgagtcgna ttacaattca ctgggcgcgc 480
ntttacaacg tcgtgactgg gaaaaccctg cggatcccac ttaatcgctt tgcagnacat 540
ccccctttcg cca
```

<210> 153

<211> 454

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 198, 307, 325, 347, 386, 389, 392, 415, 425

<223> n = A,T,C or G

<400> 153

```
tcgagcggct cgcccgggca ggtccacctt gcatggctcc tctaaacacg caactcagcg 60
aggggacccc cttcacctct ggcaagagag ctgggtagat cagaaacttg gtgacacctg 120
gctagcacag agcaggctca cttgtcttgg tccactacc cagattcctg cagacattgc 180
aaaccaaattg aaggttgntg aatgaccctt gtcccagcc acttgttttg gtatcatctg 240
ctctgcagtg gaatgcctgt gtgtttgagt tcaactctgca tctgtatatt tgagtataga 300
aaccgantca agtgcctgtt gcatncagac acactggggc acctgancac agaacaaatc 360
accttaacga tctggaatga aactgnganc antgcccgcc tgggtgggtc tgganaaact 420
gccgncttct tgttggacct tggccgcacc acct
```

<210> 154

<211> 596

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 19, 33, 37, 131, 377, 425, 439, 505

<223> n = A,T,C or G

<400> 154

```
agcgtggctcg cggcccgagg gggcctcctt gantganggg aaggagcgtg ggggcggcca 60
cggcaggatt aacctocatt tcagctaata atgggagaga ttaaagtctc tcctgattat 120
aactggttta naggtacagt tccccttaaa aagattattg tggatgatga tgacagtaag 180
atatggtcgc tctatgacgc gggcccccca agtatcaggt gtcctctcat attcctgccc 240
```

```

cctgtcagtg gaactgcaga tgtctttttc cggcagatth ttggtctgac tggatgggggt 300
taccgggtta tgcctttgca gtatccagtt tattgggacc atctcgagtt cttgtgatgg 360
attcacaaaa cttttanacc atttacaatt ggataaagtt catctttttg gcgcttcttt 420
gggangcttt ttggcccana aatttgctga atacactcac aaatctccta gaagccattc 480
cctaatactc tgcaattcct tcagngacac ctctatcttc aaccaacttg gactggaaac 540
agctttggct gatgcctgca tttatgctca aaaaatagtt cttggaaatt ttcata 596

```

```

<210> 155
<211> 343
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 6, 12, 23, 44, 58, 86, 99, 279, 310, 319
<223> n = A,T,C or G

```

```

<400> 155
ctcganttgg cncgcccggg cangtctgcc tggtttttga ccgngcgagc tatttagnct 60
ctggctctgt ttccggagct caaggnaaaa atcttgaana actcgagcag cttctgtgga 120
tagccttggg tacacatact gccgagcata gccaatgtac tttctcaata gctgggtggg 180
aatgggatct attgtttctc caggaaccac ctttagtctt tctgataatg gcttctcaga 240
aactacttca agtacggaag tatttgaatc ttgactatnc atacgagcta ctgtggcact 300
gctaattggg tctctgctnt ccagctctta ttgcaatcac atg 343

```

```

<210> 156
<211> 556
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 34, 375, 530
<223> n = A,T,C or G

```

```

<400> 156
tcgagcggcc cgcccgggca ggtctggcac cacncagatc gattaactgg ctcatctgat 60
ctcgtggccc ccaccctgga actgacttag cacaaaagga cacctcaatt ctttatgatt 120
tcatctccga cccaaccaat caacaccctt gactcactgg ccttccccct cccaccaaatt 180
tattcctaaa aactctgatc cccgaatgct cagggagatc gatttgagta ctaataagac 240
tccagtctcc tgcacaagca gctctgtgta ctcttcctct attgcaattc ctgtcttgat 300
aaatcggtc tgtgtaggcg gcggaagaag tgaacctgtt gggcggttac cacctctgtc 360
gtgtgtgaca gttgntttga atctctaatt gctcagtaca gatccacatg cagggttaagt 420
aagaagcttt tgaagaaaat ggaaagtctt aagtgatggc ttccaagaaa tcaaacctac 480
attaattagg gaacaacgga ctttacgtat cacaaatgaa gagactgaac aagtaaatca 540
acttggcctt ttctta 556

```

```

<210> 157
<211> 333
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature

```

<222> 18, 40, 55, 57, 60, 91, 97, 103, 110, 161, 173, 193, 195,
196, 214, 231, 233, 238, 263, 264, 266, 283, 284, 287, 297,
298, 323, 331

<223> n = A,T,C or G

<400> 157

```
ggtccacaaa aatatatnaa ataagctgga tatataaaan caaacactta acatngncan 60
cattccttca gttattcaaa ctactgata nctaacnggg agnagttggn attctggaag 120
acttcctaag ctaaaagtat atttacatat ttacaacaca ngtaaataata acngaagaac 180
tacttcaa at angngaaa ttccagaatt ctanagattt atagctatag ntnacaanta 240
tcaccaattg gtttgcaatc aanngnccag cactacttat gannaangtt taactannaa 300
accaaaaagg gagaaaacct ggnagggaaa nat 333
```

<210> 158

<211> 629

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 345, 565

<223> n = A,T,C or G

<400> 158

```
tgcagcggcc gcccgggcag gtctggtaca tttgtgcgag gtcgggcact ctgttctcat 60
ccagtaagtg tgcagccct ttctgcagaa ttgctgttaa atgttctcct aatagctgtt 120
tctccacaca agcaatcagt ggtttctgtg tgctgtggtc caagtaagtg attactctgt 180
ctccctcttc ttctaagcgt ttacttacat ggtaagata ttctggaacc tctctttcct 240
gcattaacct ttggccttcg gcagcatata agcaattagt ctcttccaaa aatttcagtt 300
caaataaatc ttatataacc tgcaggtcag acagcatgcc caggagggt cgcgaacagg 360
ctccggtcca cgccctcgcc gtcctctcgc cgctcgatca gcagtaggat tccatcaatg 420
gttttactct gaaccatttt atcactaata atatgggttc taaacagttc taatcccata 480
tcccagatgg agggcagcgt ggagttctgc agcacatagg tgcgggtcca gaacagggaag 540
atgcttctga tcatgaatca tttgnctggc aatggctcctg ccagcacgtg gtaatctttc 600
ttttaaaaat aaacccttat ctaaacgtc 629
```

<210> 159

<211> 629

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 33, 546, 576

<223> n = A,T,C or G

<400> 159

```
tgcagcggcc gcccgggcag gttctagagg ganaatctgg ctgatttggg aataaaatat 60
aatcgaatat tcaacaccat gaagataaat cttattttgg aaatctactg accttaatac 120
cccaagcttg ccctgaatac tttgattgga attggaatat atcaaaaaag gttagtattt 180
ttgtttagt taggatacta aaaggatatt agttacccaa gagatccaat ttgtttttct 240
gatgaatagt gttcagtaaa atgaagcagt cttgaagagt actaataatt tcaaagtgat 300
ttttcgtcta ttcttaatat tttttaatta tttattttta agagttttat accttgagca 360
gatacaatga tccgcttttag tgagaggaca atttctgatt gattgttttc tcttcaggcc 420
```

```

atctcacctc ttcattctct tgttacattt gaagcagttg atataatggg tttatacttt 480
aaaagataga catggtgccca tgaagtttgg ggaagttggg tgaattatcc cattctagtt 540
acagangagc tttccttaaa tgccctttac ttctangttt ggtcaagaag tcattttctg 600
agtaaaagtt attttcatat atgttgggg 629

```

```

<210> 160
<211> 519
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 46, 309, 397, 430, 434, 471, 497
<223> n = A,T,C or G

```

```

<400> 160
tcgagcggcg cgcccgggca ggtctgctgg gattaatgcc aagttnttca gccataaggt 60
agcgaatctc agcagaatcc agattacatc cacttccaat cacgcggtgt ttgggtaatc 120
cacttagttt ccagataaca tacgtaagaa tgtccactgg gttggaaacc acaattatga 180
tgcaatcagg actgtacttg acgatctgag gaataatgaa tttgaagaca ttaacatttc 240
tctgcaccag attgagccga ctctcccctt cttgctgacg gactcctgca gttaccacta 300
caatcttana attgggcggg tcacagaata atctttatct gccacaattt taggtgctga 360
agaaataagc tcccattgctg cagatccatc atttctnctt taagcttacc ttccaaaaca 420
tccacaagan caangttcat cagccagaga ctttcccaga atgctgatag nacacgccat 480
accaacttgt ccaacancca ctacagcgat cttattggg 519

```

```

<210> 161
<211> 446
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 5, 32, 36, 269, 354, 381
<223> n = A,T,C or G

```

```

<400> 161
cgagnggccc gcccgggcag gtccagtaag cntttnacga tgatgggaaa ggttatgcaa 60
ggtcccagcg gtacaacgag ctgtttctac atcatttgta ttctgcatgg tacgtacaat 120
agcagacacc atctgaggag aacgcatgat agcgtgtctg gaagcttcct ttttagaaag 180
ctgatggacc ataactgcag ccttattaac caccacctgg tectcgatcat ttagcagttt 240
tgtcagttca gggattgcac gtgtggcang ttctgcatca tcttgatagt taatcaagtt 300
tacaactggc atgtttcagc atctgcgatg ggctcagcaa acgctggaca ttantgggat 360
gagcagcatc aaactgtgta natgggatct gcatgccctc atctaattgc tcaggggaaca 420
tagcagctcg taccctctga gctcga 446

```

```

<210> 162
<211> 354
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 6, 19, 36, 116, 152, 174, 186, 196, 223, 249

```

<223> n = A,T,C or G

<400> 162

```
agcgtngtcg cggcccgang tcctgggaag cctttnttgc tgagcctcac agcctctgtc 60
aggcggctgc ggatccagcg gtccaccagg ctctcatggc ctccgggctg ggaggngggg 120
gagggcacaa aacccttccc aaggccacga anggcaaact tggcggcatt ccanagcttg 180
ttgcanaagt ggcggnnaacc cagtatccgg ttcacatcca ggntgatgtc acgaccctgg 240
gacatgtang cacataatcc aaaccggaga gcatcgggtc cacattcacg aatccccgct 300
gggaagtcag ctttctgccc ttctttggcc ttctccacct cgctgggata cagg      354
```

<210> 163

<211> 258

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 7, 24, 32, 153, 198, 205

<223> n = A,T,C or G

<400> 163

```
tttttcncca agtcctcttg ccgngggatc tngactgcaa ttttaagacac ttctaattag 60
ttatacccag gccctgcaaa attgctgggt ttatataata tattcttgct gcacgaagat 120
ttattattct gttggatgat tctattttta ttntatttat tctggccaaa aaagaacctt 180
ctccgctcgt caagagangc caatntgtct tgaaggacaa gagaaagatg ctaacacaca 240
ctttcttctt cttgagga      258
```

<210> 164

<211> 282

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 97, 130, 163, 178, 203, 204

<223> n = A,T,C or G

<400> 164

```
ggaacatatt actttttaat tacttgggtc aatgaaacat ttaataaaaa catttgcttc 60
tctatataat acgtatgtat aaaataagcc ttttcanaaa ctctgggttct cataatcctc 120
tataaatcan atgatctgac ttctaagagg aacaaattac agnaaggggt atacattnat 180
gaatactggg agtactagag ganngacgct aaaccactct actaccactt gcggaactct 240
cacagggtaa atgacaaagc caatgactga ctctaaaaac aa      282
```

<210> 165

<211> 462

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 10, 33, 36, 49, 198, 222, 243, 278, 357, 385, 399, 405, 437

<223> n = A,T,C or G

<400> 165

```
gcccggggcan gtcctgtaat cccagctact cangangctg agtcatgana atcgccctgaa 60
tccggggaggt agaggccgca gcgagcaaag attaagccac tgcactccag tctgggtgac 120
agagtgagaa tctgtctgtt gtcctctctg cattgggtctg aaatgggttt gtagaacatg 180
ccacagaagg accagcanca gcaacaaatg gatttgtgga angcgtagct ccaaattggag 240
cangcacact tgatgaagca cgctgtgtct gtgcagangc aaccactggc actgttccaa 300
aaacattgct gctagcatta cttgtggaag tatacgcat actggagggtg gctgcanaac 360
tgaaaacgct gtctagttct gccanagctg catacttgnc tgaanatgca cttgactgac 420
tggaactga accacanaac caacaggacc ttacctgtg ga 462
```

<210> 166

<211> 365

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 14, 18

<223> n = A,T,C or G

<400> 166

```
cgtgggtcgc ggcncgangt ctgaaaccaa tccagaacta aacatcagca cacaaaaaat 60
accaggatag atggaatcaa aagactctga agccaaaagg aggctaggga gagcaactga 120
acttagcaag ctgaggactt cagtgtccat catccgatcc tgccctgtaa caacaggtct 180
atatgataga gatattccat ctgagctgga ggccattatc cttagcaaac taacacagaa 240
cagaaaacca aatacatgtt ctcatctaga agtaggagct aaatgatgag aactcaagga 300
cacaaagaaa ggaacaacag acactggggc ctacttgagg gtggagggtg ggaggaggga 360
gaaga 365
```

<210> 167

<211> 364

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 19, 342, 361

<223> n = A,T,C or G

<400> 167

```
agcgtggtcg cggcgcgang tccagcccta gcttgccctg gactccgcct tcaactgggtg 60
ctctctctaa aagttgctga ctctttactg tatctcccaa ttcccactcc attgggtcca 120
taaggggagg ggtgtctcac tcaacatggt gttcctggta ccaagaactg gctgacgaag 180
ctgggtgccg tggctcatgc ctgtaatccc agcacttttg ggaggccaag aagggcggat 240
cacctgaggt ctggagttca agatcagcct gaccaacatg atgaaaccaa gtctccacta 300
aaaatataaa acaattagcc aggcatgggtg gtgggtgcct gnaatcccag ctactgggga 360
ngct 364
```

<210> 168

<211> 447

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature
 <222> 407, 414, 437
 <223> n = A,T,C or G

<400> 168
 cccgggagcagg tcaaaaccca aaacctttca ttttagccca aaccagctca tgattaggta 60
 tacaaggata acagaaccag ttgtcaggac gagcatttga caagtaaaag caatttcttgc 120
 aaagctgcag ttcattccagc tcatggcatg tgtctttata tagcatcctc gcaatgtcag 180
 cttgtctact gtctgtctca tagaaaatca cggatatttg gagaagcaat tgggcatcag 240
 ctttgaactc ttcataactt cggatatttcc cttcattcac tttctcttga atgggtgggaa 300
 cgtccacaga cctcgggcgc gaccacgcta agcccgaatt ctgcagatat ccatcacact 360
 ggcgcccggt cgagcatggc atctagaagg cccaattcgc ctatagnag tcgnattacc 420
 aattcactgg cgtcgnttt acaacgc 447

<210> 169
 <211> 524
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 4, 6, 39, 40, 235, 248, 313, 340, 359, 382, 389, 420, 434,
 442, 453, 496
 <223> n = A,T,C or G

<400> 169
 cgantngcgc gcccgggcag gtctgagcag cttttctggn tgctggacta ttgggattgg 60
 gttcatccaa cagagactgt atggatgtta gaatggaaga cacatcatag gttggactcc 120
 aacggttctg aagtatgtcc agacatatac taccatctgc atagactaag aacaaagaag 180
 taggtacatt aaacgtaaca agaccactaa ggttttaaca ttatagacaa aacanaaata 240
 gtoaaganta ctttgctttt gaagtttaaa gattcctatg ttgcttccca gtttaactgcc 300
 taaaaagata agncataacc accactagtg aaataatcan gatgatcaga gaatgtcana 360
 tgtgatcagt ataaaactgg angatattna gtgtcatcct ttggaaaagg ctgccctatn 420
 atccaggaaa tcanaaacat tnttgaacag ggnccctagc tatccacaga catgtgggaa 480
 attcattccc caaatngtag gctggatccc ctatctgaaa taac 524

<210> 170
 <211> 332
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 5, 10, 63, 66, 90, 93, 96, 186, 207, 261, 290, 324, 326
 <223> n = A,T,C or G

<400> 170
 tcgancggcn cgcccgggca ggtgacaaac ctgttattga agatgttggt tctgatgagg 60
 aanaanatca gaagggatgg tgacaagaan aanaanaaga agattaagga aaagtacatc 120
 gatcaagaag agctcaacaa aacaaagccc atctggacca gaaatccga cgatattact 180
 aatgangagt acggagaatt ctataanagc ttgaccaatg actgggaaga tcaacttggca 240
 gtgaagcatt tttcagttga nggacagttg gaattcagag cccttctatn tgtcccacga 300
 cgtgctcctt ttgatctggt tganancaga aa 332

<210> 171
 <211> 334
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 5, 9, 200, 228, 232
 <223> n = A,T,C or G

<400> 171
 cgagnggcn c gcccgggcag gtctgttgat agcgacttaa cagaaaagtc tagacaaaca 60
 taagcataaa aaattacagt ctttctaccc ttgggaatgg ggagaaaaag gaatctctac 120
 cccaagacca gaaataataa gtcctgtttc tggcctgaa catccagaat tatggaggct 180
 ttggcctgac accacattan aatttgggtc ggaaatcaaa ctttaganac angagatcgt 240
 aagccatttt atactatcga cctaaattcc agtctaacgg ttcctttaca aagttgcgga 300
 aagccctctt atatgctagc tgtaggaaat atag 334

<210> 172
 <211> 439
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 19, 375, 388, 390, 395, 409, 426, 434
 <223> n = A,T,C or G

<400> 172
 agcgtgggtcg cggcccgang tctgcctata aaactagact tctgacgctg ggctccagct 60
 tcattctcac aggtcatcat cctcatccgg gagagcagtt gtctgagcaa cctctaagtc 120
 gtgctcatalc tgtgctgcc aagctgggtc catgacaact tctggtgggg cgagagcagg 180
 catggcaaca aattccaagt taggtctcc aatgagcttc cttagcaaggc agaggaaggg 240
 cttttcaaag ttgtagttac ttttggcaga aatgtcgtag tactgaagat tcttctttcg 300
 gtggaagaca atggatttcg ccttcacttt ctgccttaat atccactttg gtgccacaca 360
 acacaatggg gatgntttca cacacttngn accanatctc tatgccagnt aggccatttt 420
 ggaagnactt cganggtac 439

<210> 173
 <211> 599
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 5, 31
 <223> n = A,T,C or G

<400> 173
 cgaatnggccg cccggggcagg tctgttaaaa naggaaattc agacatcgta cgactcgtaa 60
 ttgaatgtgg agctgactgc aatattttgt caaagcacca gaatagtgcc ctgcactttg 120
 cgaagcagtc taacaatgtg cttgtgtaag acttgctgaa gaaccattta gagacacttt 180
 caagagtagc agaagagaca ataaaggatt actttgaagc tcgccttgct ctgctagaac 240
 cagtttttcc aatcgcagtg catcgactct gtgagggtcc agattttttca acagatttca 300

```

attaccaacc cccacagaac ataccagaag gctctggcat cctgctgttt atcttccatg 360
caaacttttt gggtaaagaa gttattgctc ggctctgtgg accgtgtagt gtacaagctg 420
tagttctgaa tgataaattt cagcttcctg tttttctggg tctcgtctctg ttgtccaggc 480
tggagtgcag tggcgcggat tacagctcac tggagtcttg acttcccagg cacaagcaat 540
cctccacact cagcctccta actacctggg actaaaaatg caccgccacc acattccgg 599

```

```

<210> 174
<211> 458
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 30, 32, 35, 51, 61, 213, 261, 327, 347, 359, 377, 418
<223> n = A,T,C or G

```

```

<400> 174
tcgatttggc cgcccgggca ggtccatgcn gnttntgccc attcccatgg ngcccgacaa 60
ncccatcccc gaggcgaca tccccatgtt catgttcatg cccaccatgc cctgggtcat 120
ccctgcgctg tccccagag gggccattcc catggtgccc gtcattacac cgggcatgtt 180
cataggcatg ggtcccccca ggagaggggt agnttgaggc cggacaggaa gcatgtttga 240
tggagaactg aggttcacag nctccaaaac tttgagtcac cacattcata ggctgctgca 300
tattctgtct gctgaatcca ttgtatncag tgatggcctg ctggggnttt ggaaggctng 360
cataccaggt agtaagntcg tctaggctga tgtttacacc tggggtcaga ccaagtanga 420
gggcaagggt ttgctgactg attttctgga cccatata 458

```

```

<210> 175
<211> 1206
<212> DNA
<213> Homo sapiens

```

```

<400> 175
ggcagcagga agttttgtgt actgaaaaag aaactgtcag aagcaaaaga aataaaatca 60
cagttagaga accaaaaagt taaatgggaa caagagctct gcagtgtgag gtttctcaca 120
ctcatgaaaa tgaaaattat ctcttacatg aaaattgcat gttgaaaaag gaaattgcc 180
tgctaaaact ggaaatagcc aactgaaac accaatacca ggaaaaggaa aataaatact 240
ttgaggacat taagatttta aaagaaaaga atgctgaact tcagatgacc ctaaaactga 300
aagaggaatc attaaactaa agggcatctc aatatagtgg gcagcttaaa gttctgatag 360
ctgagaacac aatgctcact tctaaattga aggaaaaaca agacaaagaa atactagagg 420
cagaaattga atcacaccat cctagactgg cttctgctgt acaagaccat gatcaaattg 480
tgacatcaag aaaaagtcaa gaacctgctt tccacattgc aggagatgct tgtttgcaaa 540
gaaaaatgaa tgttgatgtg agtagtacga tatataacaa tgaggtgctc catcaaccac 600
tttctgaagc tcaaaggaaa tccaaaagcc taaaaattaa tctcaattat gcgggagatg 660
ctctaagaga aaatacattg gtttcagaac atgcacaaag agaccaacgt gaaacacagt 720
gtcaaatgaa ggaagctgaa cacatgtatc aaaacgaaca agataatgtg aacaaacaca 780
ctgaacagca ggagtctcta gatcagaaat tatttcaact acaaagcaaa aatatgtggc 840
ttcaacagca attagttcat gcacataaga aagctgacaa caaaagcaag ataacaattg 900
atattcattt tcttgagagg aaaatgcaac atcatctcct aaaagagaaa aatgaggaga 960
tatttaatta caataacat ttaaaaaacc gtatatatca atatgaaaa gagaaagcag 1020
aacagaagt tatataatag tataacactg ccaaggagcg gattatctca tcttcactct 1080
gtaattccag tgtttgtcac gtgggtgttg aataaatgaa taaagaatga gaaaaccaga 1140
agctctgata cataatcata atgataatta tttcaatgca caactacggg tgggtgctgct 1200
cgtgcc 1206

```

<210> 176
 <211> 317
 <212> PRT
 <213> Homo sapiens

<400> 176

Met	Gly	Thr	Arg	Ala	Leu	Gln	Cys	Glu	Val	Ser	His	Thr	His	Glu	Asn
1				5					10					15	
Glu	Asn	Tyr	Leu	Leu	His	Glu	Asn	Cys	Met	Leu	Lys	Lys	Glu	Ile	Ala
			20					25					30		
Met	Leu	Lys	Leu	Glu	Ile	Ala	Thr	Leu	Lys	His	Gln	Tyr	Gln	Glu	Lys
		35					40					45			
Glu	Asn	Lys	Tyr	Phe	Glu	Asp	Ile	Lys	Ile	Leu	Lys	Glu	Lys	Asn	Ala
	50					55					60				
Glu	Leu	Gln	Met	Thr	Leu	Lys	Leu	Lys	Glu	Glu	Ser	Leu	Thr	Lys	Arg
65					70					75					80
Ala	Ser	Gln	Tyr	Ser	Gly	Gln	Leu	Lys	Val	Leu	Ile	Ala	Glu	Asn	Thr
				85					90					95	
Met	Leu	Thr	Ser	Lys	Leu	Lys	Glu	Lys	Gln	Asp	Lys	Glu	Ile	Leu	Glu
			100					105					110		
Ala	Glu	Ile	Glu	Ser	His	His	Pro	Arg	Leu	Ala	Ser	Ala	Val	Gln	Asp
		115					120					125			
His	Asp	Gln	Ile	Val	Thr	Ser	Arg	Lys	Ser	Gln	Glu	Pro	Ala	Phe	His
	130					135					140				
Ile	Ala	Gly	Asp	Ala	Cys	Leu	Gln	Arg	Lys	Met	Asn	Val	Asp	Val	Ser
145					150					155					160
Ser	Thr	Ile	Tyr	Asn	Asn	Glu	Val	Leu	His	Gln	Pro	Leu	Ser	Glu	Ala
				165					170					175	
Gln	Arg	Lys	Ser	Lys	Ser	Leu	Lys	Ile	Asn	Leu	Asn	Tyr	Ala	Gly	Asp
			180					185					190		
Ala	Leu	Arg	Glu	Asn	Thr	Leu	Val	Ser	Glu	His	Ala	Gln	Arg	Asp	Gln
		195					200					205			
Arg	Glu	Thr	Gln	Cys	Gln	Met	Lys	Glu	Ala	Glu	His	Met	Tyr	Gln	Asn
						215					220				
Glu	Gln	Asp	Asn	Val	Asn	Lys	His	Thr	Glu	Gln	Gln	Glu	Ser	Leu	Asp
225					230					235					240
Gln	Lys	Leu	Phe	Gln	Leu	Gln	Ser	Lys	Asn	Met	Trp	Leu	Gln	Gln	Gln
				245					250					255	
Leu	Val	His	Ala	His	Lys	Lys	Ala	Asp	Asn	Lys	Ser	Lys	Ile	Thr	Ile
			260					265					270		
Asp	Ile	His	Phe	Leu	Glu	Arg	Lys	Met	Gln	His	His	Leu	Leu	Lys	Glu
		275					280					285			
Lys	Asn	Glu	Glu	Ile	Phe	Asn	Tyr	Asn	Asn	His	Leu	Lys	Asn	Arg	Ile
	290					295					300				
Tyr	Gln	Tyr	Glu	Lys	Glu	Lys	Ala	Glu	Thr	Glu	Val	Ile			
305					310					315					

<210> 177
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Made in the lab

<400> 177

ccaatcatct ccacaggagc

20

<210> 178

<211> 1665

<212> DNA

<213> Homo sapiens

<400> 178

```

gcaaacctttc aagcagagcc tcccgagaag ccactctgctt tcgagcctgc cattgaaatg 60
caaaagtctg ttccaaataa agccttggaag ttgaagaatg aacaaacatt gagagcagat 120
cagatgttcc cttcagaatc aaaacaaaag aagggttgaag aaaattcttg ggattctgag 180
agtctccgtg agactgtttc acagaaggat gtgtgtgtac ccaaggctac acatcaaaaa 240
gaaatggata aaataagtgg aaaattagaa gattcaacta gcctatcaaa aatcttggat 300
acagttcatt cttgtgaaag agcaagggaa cttcaaaaag atcactgtga acaacgtaca 360
ggaaaaatgg aacaaatgaa aaagaagttt tgtgtactga aaaagaaact gtcagaagca 420
aaagaaataa aatcacagtt agagaaccaa aaagttaaat gggaacaaga gctctgcagt 480
gtgaggtttc tcacactcat gaaaatgaaa attatctctt acatgaaaat tgcattgtga 540
aaaaggaaat tgccatgcta aaactggaaa tagccacact gaaacaccaa taccaggaaa 600
agggaaataa atactttgag gacattaaga ttttaaaaga aaagaatgct gaacttcaga 660
tgaccctaaa actgaaagag gaatcattaa ctaaaagggc atctcaatat agtgggcagc 720
ttaaagttct gatagctgag aacacaatgc tcacttctaa attgaaggaa aaacaagaca 780
aagaaatact agaggcgaga attgaatcac accatcctag actggcttct gctgtacaag 840
accatgatca aattgtgaca tcaagaaaaa gtcaagaacc tgctttccac attgcaggag 900
atgcttggtt gcaaagaaaa atgaatgttg atgtgagtag tacgatatat aacaatgagg 960
tgctccatca accactttct gaagctcaaa ggaaatccaa aagcctaaaa attaatctca 1020
attatgccgg agatgctcta agagaaaaata cattggtttc agaacatgca caaagagacc 1080
aacgtgaaac acagtgtcaa atgaagggaag ctgaacacat gtatcaaaac gaacaagata 1140
atgtgaacaa acacactgaa cagcaggagt ctctagatca gaaattattt caactacaaa 1200
gcaaaaaatat gtggcttcaa cagcaattag ttcatgcaca taagaaaagct gacaacaaaa 1260
gcaagataac aattgatatt cattttcttg agaggaaaat gcaacatcat ctctctaaag 1320
agaaaaatga ggagatatat aattacaata accatttaaa aaaccgtata tatcaatatg 1380
aaaaagagaa agcagaaaca gaaaactcat gagagacaag cagtaagaaa cttcttttgg 1440
agaaacaaca gaccagatct ttactcaca ctcatgctag gaggccagtc ctagcattac 1500
cttatgttga aaatcttacc aatagtctgt gtcaacagaa tacttatttt agaagaaaaa 1560
ttcatgattt cttctgaag cctgggagac agagcgagac tctgtctcaa aaaaaaaaaa 1620
aaaaaaaaagaa agaaagaaat gcctgtgctt acttcgcttc ccagg 1665

```

<210> 179

<211> 179

<212> PRT

<213> Homo sapiens

<400> 179

```

Ala Asn Phe Gln Ala Glu Pro Pro Glu Lys Pro Ser Ala Phe Glu Pro
 1           5           10          15
Ala Ile Glu Met Gln Lys Ser Val Pro Asn Lys Ala Leu Glu Leu Lys
          20          25          30
Asn Glu Gln Thr Leu Arg Ala Asp Gln Met Phe Pro Ser Glu Ser Lys
          35          40          45
Gln Lys Lys Val Glu Glu Asn Ser Trp Asp Ser Glu Ser Leu Arg Glu
          50          55          60

```

```
<210> 180
<211> 1681
<212> DNA
<213> Homo sapiens
```

<400> 180						
gatacagtc	ttcttgtgaa	agagcaagg	aacttcaaaa	agatcactgt	gaacaacgta	60
caggaaaaat	ggaacaaatg	aaaaagaagt	tttgtgtact	gaaaaagaaa	ctgtcagaag	120
caaaagaaat	aaaatcacag	ttagagaacc	aaaaagttaa	atgggaacaa	gagctctgca	180
gtgtgagatt	gactttaaac	caagaagaag	agaagagaag	aatgccgat	atattaaatg	240
aaaaaattag	ggaagaatta	ggaagaatcg	aagagcagca	taggaaagag	ttagaagtga	300
aacaacaact	tgaacaggct	ctcagaatac	aagatataga	attgaagagt	gtagaaagta	360
atttgaatca	ggttttctcac	actcatgaaa	atgaaaatta	tctcttacat	gaaaattgca	420
tgttgaaaaa	ggaaattgcc	atgctaaaac	tggaaatagc	cacactgaaa	caccaatacc	480
aggaaaagga	aaataaatac	tttgaggaca	ttaagatttt	aaaagaaaag	aatgctgaac	540
ttcagatgac	cctaaaactg	aaagaggaat	cattaactaa	aagggcacat	caatatagtg	600
ggcagcttaa	agttctgata	gctgagaaca	caatgctcac	ttctaaattg	aaggaaaaac	660
aagacaaaaga	aatactagag	gcagaaattg	aatcacacca	tcttagactg	gcttctgctg	720
tacaagacca	tgatcaaatt	gtgacatcaa	gaaaaagtca	agaacctgct	ttccacattg	780
caggagatgc	ttgtttgcaa	agaaaaatga	atgttgatgt	gagtagtacg	atatataaca	840
atgaggtgct	ccatcaacca	ctttctgaag	ctcaaaggaa	atccaaaagc	ctaaaaatta	900
atctcaatta	tgcggagat	gctctaagag	aaaatacatt	ggtttcagaa	catgcacaaa	960
gagaccaacg	tgaaacacag	tgtcaaatag	aggaagctga	acacatgtat	caaacgaac	1020
aagataatgt	gaacaaacac	actgaacagc	aggagtctct	agatcagaaa	ttattttcaac	1080
tacaagcaa	aaatatgtgg	cttcaacagc	aattagttca	tgcacataag	aaagctgaca	1140
acaaaagcaa	gataacaatt	gatattcatt	ttcttgagag	gaaaatgcaa	catcatctcc	1200
taaaagagaa	aatgaggag	atattttaatt	acaataacca	tttaaaaaac	cgtatatatc	1260
aatatgaaaa	agagaaagca	gaaacagaaa	actcatgaga	gacaagcagt	aagaaacttc	1320
ttttggagaa	acaacagacc	agatctttac	tcacaactca	tgctaggagg	ccagtcctag	1380
cattacccta	tgttgaaaaa	tcttaccaat	agtctgtgtc	aacagaatac	ttatttttaga	1440
agaaaaattc	atgattttctt	cctgaagcct	acagacataa	aataacagtg	tgaagaatta	1500
cttgttcacg	aattgctataa	aagctgcoca	ggattttccat	ctaccctgga	tgatgccgga	1560
gacatcattc	aatccaacca	gaatctcgct	ctgtcactca	ggctggagtg	cagtgggcgc	1620
aatctcggtc	cactgcaact	ctgcctccca	ggttcacgcc	attctctggc	acagcctccc	1680
g						1681

<210> 181
 <211> 432
 <212> PRT
 <213> Homo sapiens

<400> 181

Asp	Thr	Val	His	Ser	Cys	Glu	Arg	Ala	Arg	Glu	Leu	Gln	Lys	Asp	His
1				5					10					15	
Cys	Glu	Gln	Arg	Thr	Gly	Lys	Met	Glu	Gln	Met	Lys	Lys	Lys	Phe	Cys
			20					25					30		
Val	Leu	Lys	Lys	Lys	Leu	Ser	Glu	Ala	Lys	Glu	Ile	Lys	Ser	Gln	Leu
	35					40						45			
Glu	Asn	Gln	Lys	Val	Lys	Trp	Glu	Gln	Glu	Leu	Cys	Ser	Val	Arg	Leu
	50					55					60				
Thr	Leu	Asn	Gln	Glu	Glu	Glu	Lys	Arg	Arg	Asn	Ala	Asp	Ile	Leu	Asn
65					70					75					80
Glu	Lys	Ile	Arg	Glu	Glu	Leu	Gly	Arg	Ile	Glu	Glu	Gln	His	Arg	Lys
				85					90					95	
Glu	Leu	Glu	Val	Lys	Gln	Gln	Leu	Glu	Gln	Ala	Leu	Arg	Ile	Gln	Asp
			100					105					110		
Ile	Glu	Leu	Lys	Ser	Val	Glu	Ser	Asn	Leu	Asn	Gln	Val	Ser	His	Thr
	115						120					125			
His	Glu	Asn	Glu	Asn	Tyr	Leu	Leu	His	Glu	Asn	Cys	Met	Leu	Lys	Lys
	130					135					140				
Glu	Ile	Ala	Met	Leu	Lys	Leu	Glu	Ile	Ala	Thr	Leu	Lys	His	Gln	Tyr
145					150					155					160
Gln	Glu	Lys	Glu	Asn	Lys	Tyr	Phe	Glu	Asp	Ile	Lys	Ile	Leu	Lys	Glu
				165					170					175	
Lys	Asn	Ala	Glu	Leu	Gln	Met	Thr	Leu	Lys	Leu	Lys	Glu	Glu	Ser	Leu
	180							185					190		
Thr	Lys	Arg	Ala	Ser	Gln	Tyr	Ser	Gly	Gln	Leu	Lys	Val	Leu	Ile	Ala
	195						200					205			
Glu	Asn	Thr	Met	Leu	Thr	Ser	Lys	Leu	Lys	Glu	Lys	Gln	Asp	Lys	Glu
	210					215					220				
Ile	Leu	Glu	Ala	Glu	Ile	Glu	Ser	His	His	Pro	Arg	Leu	Ala	Ser	Ala
225					230					235					240
Val	Gln	Asp	His	Asp	Gln	Ile	Val	Thr	Ser	Arg	Lys	Ser	Gln	Glu	Pro
				245					250					255	
Ala	Phe	His	Ile	Ala	Gly	Asp	Ala	Cys	Leu	Gln	Arg	Lys	Met	Asn	Val
			260					265					270		
Asp	Val	Ser	Ser	Thr	Ile	Tyr	Asn	Asn	Glu	Val	Leu	His	Gln	Pro	Leu
	275						280					285			
Ser	Glu	Ala	Gln	Arg	Lys	Ser	Lys	Ser	Leu	Lys	Ile	Asn	Leu	Asn	Tyr
	290					295					300				
Ala	Gly	Asp	Ala	Leu	Arg	Glu	Asn	Thr	Leu	Val	Ser	Glu	His	Ala	Gln
305					310					315					320
Arg	Asp	Gln	Arg	Glu	Thr	Gln	Cys	Gln	Met	Lys	Glu	Ala	Glu	His	Met
				325					330					335	
Tyr	Gln	Asn	Glu	Gln	Asp	Asn	Val	Asn	Lys	His	Thr	Glu	Gln	Gln	Glu
			340					345					350		
Ser	Leu	Asp	Gln	Lys	Leu	Phe	Gln	Leu	Gln	Ser	Lys	Asn	Met	Trp	Leu
	355						360					365			
Gln	Gln	Gln	Leu	Val	His	Ala	His	Lys	Lys	Ala	Asp	Asn	Lys	Ser	Lys
	370					375					380				

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Ile Thr Ile Asp Ile His Phe Leu Glu Arg Lys Met Gln His His Leu
 385 390 395 400
 Leu Lys Glu Lys Asn Glu Glu Ile Phe Asn Tyr Asn Asn His Leu Lys
 405 410 415
 Asn Arg Ile Tyr Gln Tyr Glu Lys Glu Lys Ala Glu Thr Glu Asn Ser
 420 425 430

<210> 182
 <211> 511
 <212> DNA
 <213> Homo sapiens

<400> 182
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 ttacaggaaa tcccagagcc tgaggttttc tcccagattt gagaactcta gattctgcat 120
 cattatcttt gagtctatat tctcttgggc tgtaagaaga tgaggaatgt aataggtctg 180
 ccccaagcct ttcattgcctt ctgtaccaag cttgttttct tgtgcatcct tcccaggctc 240
 tggctgcccc ttattggaga atgtgatttc caagacaatc aatccacaag tgtctaagac 300
 tgaatacaaa gaacttcttc aagagttcat agacgacaat gccactacaa atgccataga 360
 tgaattgaag gaatgttttc ttaaccaaac ggatgaaact ctgagcaatg ttgaggtggt 420
 tatgcaatta atatatgaca gcagtctttg tgatttattt taactttctg caagaccttt 480
 ggctcacaga actgcagggt atggtgagaa a 511

<210> 183
 <211> 260
 <212> DNA
 <213> Homo sapiens

<400> 183
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 gccagggtgca gcgtccatct ccacattgac atctccaccc acctggcctc tcagggcatt 180
 catctcctcc tcgtggttct tcttcaggta ggccagctcc tccttcaggc tctcaatctg 240
 catctccagg tcagctctgg 260

<210> 184
 <211> 461
 <212> DNA
 <213> Homo sapiens

<400> 184
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 agggcctttt ctactgtat gactgttact tgaccttctt tgaaaagcat toccaaaatg 120
 ctctatttta gatagattaa catcaaccaa cataattttt tttagatcga gtcagcataa 180
 atttctaagt cagcctctag tcgtggttca tctctttcac ctgcatttta tttggtgttt 240
 gtctgaagaa aggaaagagg aaagcaaata cgaattgtac tatttgtacc aaatctttgg 300
 gattcattgg caaataattt cagtgtggtg tattattaaa tagaaaaaaa aaattttgtt 360
 tcctaggttg aaggtctaatt tgataccgtt tgacttatga tgaccattta tgcactttca 420
 aatgaatttg ctttcaaaat aaatgaagag cagacctcgg c 461

<210> 185
 <211> 531
 <212> DNA

<213> Homo sapiens

<400> 185

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tctgatttta tttccttctc aaaaaaagtt atttacagaa ggtatatatc aacaatctga 60
caggcagtga acttgacatg attagctggc atgatttttt cttttttttc ccccaaacat 120
tgtttttgtg gccttgaatt ttaagacaaa tattctacac ggcattattg acaggatgga 180
tggaaaaaaa aagtttaaaa acaaaaaccc ttaacggaac tgccttaaaa aggagacgt 240
cctagtgcct gtcattgttat attaaacata catacacaca atctttttgc ttattataat 300
acagacttaa atgtacaaag atgtttttcca cttttttcaa tttttaaaca caacagctat 360
aaacctgaac acatatgcta tcatcatgcc ataagactaa aacaattata tttagcgaca 420
agtagaaagg attaaatagt caaatacaag aatgaaaaac gcagtacata gtgtcgcgaa 480
ctcaaatcgg catttagata gatccagtgg tttaaacggc acgtttttgc t 531
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<210> 186

<211> 441

<212> DNA

<213> Homo sapiens

<400> 186

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atcaaaagaa tcatcatctt taccttgact tttcaggga ttactgaact ttcttctcag 120
aagatagggc acagccattg ccttgccctc acttgaaggg tctgcatttg ggtcctctgg 180
tctcttgcca agtttcccaa ccactcgagg gagaaatata gggagggttg acttcctcgg 240
gggctttccc gagggcttca ccgtgagccc tgcggccctc agggctgcaa tcttgatttc 300
aatgtctgaa acctcgctct ctgcctgctg gacttctgag ggcgtcactg ccactctgtc 360
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ctgggggctt ttttctgtgc t 441
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<210> 187

<211> 371

<212> DNA

<213> Homo sapiens

<400> 187

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caggctgctg atggtgagag tgaactctgt cccagatcca ctgccgctga accttgatgg 120
gacccagat tctaaactag acgccttatg gatcaggagc tttggggctt tccctgggtt 180
ctgttgatac caggccaacc aactactaac actctgactg gcccggaag tgatgggtgac 240
tctgtctcct acagttgcag acagggtgga aggagactgg gtcactctgga tgcacattt 300
ggcacctggg agccagagca gcaggagccc caggagctga gcggggaccc tcatgtccat 360
gctgagtcct g 371
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<210> 188

<211> 226

<212> DNA

<213> Homo sapiens

<400> 188

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ttttattcct tgataatttt cttttttttt tttttgtgga tggggacttg tgaatttttc 120
taaagggtgt atttaacatg ggaggagagc gtgtgcggct ccagccagc ccgctgctca 180
ctttccacc tctctccacc tgcctctggc ttctcaggac ctgcc 226
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<210> 189

<211> 391
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 43, 112, 131, 156, 195, 208, 221, 317, 333, 367
 <223> n = A,T,C or G

<400> 189
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 tggattctgg gcatcgtcgg cgcattgctt taatcctact tgggaggttg anacaggaga 120
 cctcgccgcg naccacgcta agggcgaatt ctgcanatat ccatcacact ggccggccgct 180
 cgagcatgca tctanagggc ccaattcncc ctatagttag ncgtattaca attcactggc 240
 cgtcgtttta caacgctcgt actgggaaaa ccctggcggt acccaactta atcgcccttg 300
 agcacatccc cctttcncca gctggcttaa tancgaagag gcccgccaccg atcgcccttc 360
 ccaacanttg cgcagcctga atggcgaatg g 391

<210> 190
 <211> 501
 <212> DNA
 <213> Homo sapiens

<400> 190
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 actggaggag ctggcagagg cggttgctgt aaactcctct gccacatctt cctcctcttc 120
 acctgggttg aatgactcat cggttttctt tcttgagtca tcgtgctgt cattggcatt 180
 ctctctcccg atcttgccct cctccttcat cctctccaag taggcatcat gctggtcctc 240
 atcagagtca gcatattcat cgtagcttgg gttcatgccc tctttcaatc ctcggttttt 300
 gatgttgagc tttttcgcgt tgacaaaatc aaacagtttc ccgtactcct cctctcfaat 360
 gctgctgaag gtatactgag tgccctgctt ggtctcaatt tcaaagtcaa aggaacgagt 420
 agtagtggtt ccacgagcaa agttgacaaa ggagatctca tcgaagcgga tgtgcacagg 480
 tggttgttg acgtagatga a 501

<210> 191
 <211> 241
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 49
 <223> n = A,T,C or G

<400> 191
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 aacagaaagt aaaaactaac atggattgct ataaatatgc tgaagcctag ttgttcaaat 120
 gatacaattc tctcatgcta ctctaaagtt tataaagaaa aaggatttac actttacaca 180
 ctgtacacaa aaggaatacc ttctgagagc cagggagtgg ggaaagggga aggagacttg 240
 a 241

<210> 192
 <211> 271
 <212> DNA

$\langle 220 \rangle$

<222> 6, 17, 23, 26, 70, 227, 245

<223> n = A, T, C or G

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gatagaagan	caaaccacgt	cccacgaatc	ccaataatga	cagcttcaga	ctttgtcttt	120
ttacaacatt	gaaaaattat	tctttaatgt	ataaagtaat	tttatgtaaa	ttaataaaatc	180
ataatttcac	ttccacattg	attaaagctg	ctgtatagat	ttaggnggca	ggacttaata	240
atagnggaaa	tgaaattatg	atttattaat	c			271

<211> 351

<213> Homo sapiens

agtcgaggcg	ctgatcccta	aaatggcgaa	catgtgtttt	catcatttca	gccaaagtcc	60
taacttcctt	tgcctttcct	atcacctcga	gaagtaatta	tcagttgggt	tggatttttg	120
gaccaccggt	cagtcatttt	gggttgcct	gtcccaaaa	cattttaaat	gaaagtattg	180
gcattcaaaa	agacagcaga	caaaatgaaa	gaaaatgaga	gcagaaagta	agcatttcca	240
gcctatctaa	tttctttagt	tttctatttg	cctccagtcg	agtccatttc	ctaattgtata	300
ccagcctact	gtactattta	aaatgctcaa	tttcagcacc	gatggacctg	c	351

 $\langle 211 \rangle$ 311

<213> Homo sapiens

ctgagacaca	gaggccact	gcgaggggga	cagtggcgg	gggactgacc	tgctgacagt	60
caccctccct	ctgctgggat	gaggtccagg	agccaactaa	aacaatggca	gaggagacat	120
ctctggtggt	cccaccacc	tagatgaaaa	tccacagcac	agacctctac	cgtgtttctc	180
ttccatccct	aaaccacttc	cttaaaatgt	ttggatttgc	aaagccaatt	tggggcctgt	240
ggagcctggg	gttgatagg	gccatggctg	gtccccacc	atacctcccc	tccacatcac	300
tgacacagac	c					311

<211> 381

<213> Homo sapiens

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ggttgtctga	gagagagctt	cttgtcctgt	ctttttcctt	ccaatcaggg	gctcgctctt	180
ctgattattc	ttcaggggca	tgacataaat	tgtatatctg	gttcccgggt	ccaggccagt	240
aatagtagcc	tctgtgacac	cagggcgggg	ccgagggacc	acttctctgg	gaggagaccc	300
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cagcagggaa	ttgggtgtgg	t				381

<210> 196
 <211> 401
 <212> DNA
 <213> Homo sapiens

<400> 196
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 gcccaaacct ggagacctga ttgagatttt ccgccttggc tatgagcact gggccctgta 120
 tataggagat ggctacgtga tccatctggc tcctccaagt gagtaccccg gggctggctc 180
 ctccagtgtc ttctcagtcc tgagcaacag tgcagaggtg aaacgggagc gcctggaaga 240
 tgtggtggga ggctgttgct atcgggtcaa caacagcttg gaccatgagt accaaccacg 300
 gcccgtaggag gtgatcacca gttctgcgaa ggagatggtt ggtcagaaga tgaagtacag 360
 tattgtgagc aggaactgtg agcactttgt caccagacc t 401

<210> 197
 <211> 471
 <212> DNA
 <213> Homo sapiens

<400> 197
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 aactttgtac cttgattgcc ttacaaagtt atttgtttac aaacagcgac catataaaag 120
 cctctgccc caaagcttgt gggcacatgg gcacatacag actcacatac agacacacac 180
 atatatgtac agacatgtac tctcacacac acaggcacca gcatacacac gtttttctag 240
 gtacagctcc caggaacagc taggtgggaa agtcccatca ctgagggagc ctaaccatgt 300
 ccctgaacaa aaattgggca ctcatctatt ctttttctct tgtgtcccta ctcattgaaa 360
 ccaaactctg gaaaggaccc aatgtaccag tatttatacc tctagtgaag cacagagaga 420
 ggaagagagc tgcttaaaact cacacaacaa tgaactgcag acacagacct g 471

<210> 198
 <211> 201
 <212> DNA
 <213> Homo sapiens

<400> 198
 ggtccattga ggctctgtcg gccatgccc cagttcgaag ctttgccaac gaggagggcg 60
 aagcccagaa gtttagggaa aagctgcaag aaataaagac actcaaccag aaggaggctg 120
 tggcctatgc agtcaactcc tggaccacta gtatttcagg tatgctgctg aaagtgggaa 180
 tcctctacat tggtagggcag a 201

<210> 199
 <211> 551
 <212> DNA
 <213> Homo sapiens

<400> 199
 tctggcacag atcttcaccc acacggcggt ccacgtgctg atcatcttcc gggctctcacc 60
 gggcctggaa cacaccatct tccccatgag ccggtgccc agtctggtga cttccatctt 120
 ggcccctggc cttatgtccc agttatgacc cctgacttca actctggctc ttaccctgta 180
 actccagtc cttctctgaca tttttaacac ccggccttgt gaccgtggac atagctcctg 240
 accctgattc ccatcttgag ccagtggtta gtccatgaga tcatgacctg actcctggtc 300
 tccaaccttg tgatcctaatt tctgggacct caatcctagc ctctgaactt gggaccctgg 360
 agctcctgac cttagtctctg accgtacccc ttgattctga cctttgatcc tgtaacttag 420
 gggtagggccc tgaccttatt actgtcattt agctccttga ccttgccact tcaatcctgg 480

ctttatgacc tctactctc aattttaact ttaaccaa at gaccaaattt gtgacactaa 540
atgaccacaa t 551

<210> 200
<211> 211
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 8, 36, 40, 78, 165, 170, 171, 173, 203, 207, 208
<223> n = A,T,C or G

<400> 200
cagctcancg ggcgacatgc ccctacaagt tggcanaagn ggctgccact gctgggtttg 60
tgtaagagag gctgctgnca ccattacctg cagaaacctt ctcatagggg ctacgatcgg 120
tactgctagg gggcacatag cgcccatggg tgtggttagt ggggnactcn ntnataggat 180
ggtagggtatc ccgggctgga aanatgnnca g 211

<210> 201
<211> 111
<212> DNA
<213> Homo sapiens

<400> 201
ccagtgaag gaaacaaaac tggcagtttg tccatttgaa tatcagacct agtttcttct 60
taatttccac actatttctc ccatattcct taaacttctt ggcattccacc t 111

<210> 202
<211> 331
<212> DNA
<213> Homo sapiens

<400> 202
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ggagagagag agagaggaaa attccctaac ccttggttta aagacaatat tcattttattg 120
ctcaaatgat gcttttaagg gaggacagt gaataaaaata aacttttttt ttctccctac 180
aatacataga agggttatca aaccactcaa gtttcaaaat ctttccaggg tccaatatca 240
ctttttttct ttcggttcaa tgaaaagcta aatgtaataa tactaattat agataaaaatt 300
ttattttact ttttaaaaat ttgtccagac c 331

<210> 203
<211> 491
<212> DNA
<213> Homo sapiens

<400> 203
agtcacccag tctacttagt acctgggttg tgccctctgac cttttcagct tgataccctg 60
ggcttttagtg taaccaataa atctgtagtg accttacctg tattccctgt gctatcctgt 120
gggaaggtag gaatgggcta agtatgatga atgtataggt tagggatctt ttggttttaa 180
atcacagaaa acctaatcca aactggctta aaataaaaag gattttattg ttcagtgaac 240
tagaaaagtcc ataggtagtg ctggctccag gtgaagactt gaccagtag ttcagtatgt 300
ctctaaatac cggactgact tttttctcac tgttgcatct tctgtaggac catttaagtc 360
tgggccactt aatggctgcc agcattccta agattacact tttccccatt tatgtccaat 420

cagaaaaaga aggcattctt gtaccagaaa tctcagcaaa agccctaata ttcacactga 480
ttaggacctg c 491

<210> 204
<211> 361
<212> DNA
<213> Homo sapiens

<400> 204
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actgccgtct tcagtggaca gggcatctgt tatcctgaga cctgtggcag acacgtcttg 120
ttttcatttg atttttgtta agagtgcagt attgcagagt ctagaggaat ttttgtttcc 180
ttgattaaca tgattttcct ggttggttaca tccagggcat ggcagtggcc tcagccttaa 240
acttttggtc ctactccac cctcagcgaa ctgggcagca cggggagggt ttggctaccc 300
ctgcccattc ctgagccagg taccaccatt gtaaggaaac actttcagaa attcagacct 360
c 361

<210> 205
<211> 471
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 2, 3
<223> n = A,T,C or G

<400> 205
cnngtacagt tcttcctgga tggccgacac agatcctggg gaaaggcaat cctggcactg 60
ctctgaaacc agagctcctc ctccctcccc gggcaggggt gagctgagaa gggctgctct 120
agcgttggga ctccacctcc atacacctga tattttgata gggcaggtcc ctgctatggg 180
ccactgttct gggcagtata gtatgcttga cagcatcctt ggcattctat caccagatcc 240
cagagcaccg gctactagct gtgacaacat cctccaaaca ttgcaaaatt tcccctggga 300
ggcaagattg cctcagatgg gagaatcacg ctctagggaa atctgctggt atgagaaccc 360
caactcccca ctccactgag cctccagatg gcgagcaggc tgcagctcca gcacagacac 420
gaagctccct ccagccactg acggtccatg gctgggggta cccaggacct c 471

<210> 206
<211> 261
<212> DNA
<213> Homo sapiens

<400> 206
tagagtattt agagtcctga gataacaagg aatccaggca tccttttagac agtcttctgt 60
tgtcttttct tcccaatcag agatttgttg atgtgtggaa tgacaccacc accagcaatt 120
gtagccttga tgagagaatc caattcttca tctccacgaa tagcaagttg caagtgaaga 180
ggggttaatac gctttacctt taagtctttt gatgcatttc ctgccagttc aagtaacctt 240
gcggtgaggt actccaggat g 261

<210> 207
<211> 361
<212> DNA
<213> Homo sapiens

<400> 207
gctctccggg agcttgaaga agaaactggc tacaaagggg acattgccga atgttctcca 60
gcgggtctgta tggacccagg cttgtcaaac tgtactatac acatcgtgac agtcaccatt 120
aacggagatg atgccgaaaa cgcaaggccg aagccaaagc caggggatgg agagtttgtg 180
gaagtcattt ctttacccaa gaatgacctg ctgcagagac ttgatgctct ggtagctgaa 240
gaacatctca cagtggacgc cagggctctat tcctacgctc tagcactgaa acatgcaaat 300
gcaaagccat ttgaagtgcc cttcttgaaa ttttaagccc aaatatgaca ctggacctgc 360
c 361

<210> 208
<211> 381
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 10, 27, 37, 46, 75, 95, 102, 137, 143, 202, 234, 278, 310, 351
<223> n = A,T,C or G

<400> 208
agaggagatn tttgccatgc ctgaatnctt tcctatncca ccctancact taacatatta 60
cttagtctgc tttgntaaaa gcaagtatta ccttnaactt gnetcttact ctttgccctt 120
tagctaacta ataaagnttg atntaggcat tattatataa ttctgagtca ttcattggat 180
ctctcatgtt tgatgtatnt tncaaaactaa gatctatgat agtttttttt ccanagttcc 240
attaaatcat ttatttcctt tacttttctca cctctgtnga aacattttaga aactggattt 300
gggaacccan ttttgaaaa ccagattcat agtcatgaaa atggaaactt ncatattctg 360
tttttgaaaa gatgtggacc t 381

<210> 209
<211> 231
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 83
<223> n = A,T,C or G

<400> 209
gtggagagca agtgatttat taaagcaaga cgttgaaacc tttacattct gcagtgaaga 60
tcagggtgtc attgaaagac agnggaaacc aggatgaaag tttttacatg tcacacacta 120
catttcttca atattttcac caggacttcc gcaatgaggc ttcgtttctg aaggacatc 180
tgatccgtgc atctcttcac tcctaacttg gctgcaacag cttccacctg c 231

<210> 210
<211> 371
<212> DNA
<213> Homo sapiens

<400> 210
tccatcctgg ttttgacag atcaggttgt tgacagttcc tgggtgaccc acagctaccc 60
atgtcagtta tctccactaa catatccaag aatctttgta ggacaatttc tccacctgca 120
aggtttttta ggtagaactc ttcttttaag gcaattagcc cattgccaaa aggttttact 180

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gtcttaaagc tgtctttctg agatctaatt ccaaggactt ctccacagct aagtgagatg 240
cctcacacca ttaggtgatg ctttggacag aacagagtat ttcatcttg tgtttaaagc 300
aattccttgg cttcggctcc tcaccacttt ctatgccagt ctcccatita tgccttagt 360
aatgcctatg c                                     371

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<210> 211
<211> 471
<212> DNA
<213> Homo sapiens

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<400> 211
tttattttta aagaaaaaaaa ttaaaataga gccaacaaat gcaattaaga aaaaaaaagt 60
attgagacac aaggggacct acatgttctg gtctaagaag catgcaagta ttacaaagca 120
ttccagatac agtatgacag aggaacagtg aacaagcatt ggaacgatgc tctttctttc 180
agaaacggga agtctaacag ttatgttttc acaatggtag tgattaaacc atctttatct 240
ttaaggaatt ttataggaag aatttttagca ccatcattaa aggaaaaata ataatacctt 300
tttagccctg cctatctcca gtcttggaat aataacagaa gcatagcacc tttcagtatc 360
taaaatataa acaagaatag taagtccatc ccagcttcta gagatgaggt agctcatgct 420
aagaaatggt ggggtcatttt tcctatgaaa gttcaaaggc caaatggtca c                                     471

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<210> 212
<211> 401
<212> DNA
<213> Homo sapiens

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<400> 212
tggcctgtct ccttcacata gtccatatca ccacaaatca cacaacaaaa gggagaggat 60
atattttggg ttcaaaaaaa gtaaaaagat aatgtagctg catttctttg gttatttttg 120
gccccaaata ttctctcatc tttttgttgt tgtcatggat ggtgggtgaca tggacttggt 180
tatagaggac aggtcagctc tctggctcgg tgatctacat tctgaagttg tctgaaaatg 240
tcttcatgat taaattcagc ctaaacgttt tgccgggaac actgcagaga caatgctgtg 300
agtttccaac ctgagcccat ctgcgggcag agaaggtcta gtttgccat caccattatg 360
atatcaggac tggttacttg gttaaggagg ggtctacctc g                                     401

```

```

<210> 213
<211> 461
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 239, 290, 358, 359, 391, 393
<223> n = A,T,C or G

```

```

<400> 213
tgtgaagcat acataaataa atgaagtaag ccatactgat ttaattttatt ggatgttatt 60
ttccctaaga cctgaaaaatg aacatagtat gctagtattt ttccagtgtt agccttttac 120
tttctctaca caatttgga tcatataata taggtacttt gtccctgatt aaataatgtg 180
acggatagaa tgcatacagt gtttattatg aaaagagtgg aaaagtatat agcttttanc 240
aaaagggtgt ttgccattct aagaaatgag cgaatatata gaaatagtgn gggcatttct 300
tctgttagg tggagtgtat gtgttgacat ttctcccat ctcttccac tctgttttnt 360
ccccattatt tgaataaagt gactgctgaa nangactttg aatccttatc cacttaattt 420
aatgttttaa gaaaaaccta taatggaaag tgagactcct t                                     461

```

<210> 214
 <211> 181
 <212> DNA
 <213> Homo sapiens

<400> 214
 cctgagcttc tactcctttc ccttaagatt cctccaaagc accagctcca taaaatcctt 60
 cagctcccca gaccacacc aagaaccca catgttaatt ggatcagcca aatctacaag 120
 cagataagtc ctaaggagaa tgccgaagcg tttttcttct tcctcaagcc tagcatgaga 180
 c 181

<210> 215
 <211> 581
 <212> DNA
 <213> Homo sapiens

<400> 215
 ctgctttaag aatgggttttc cacctttttc coctaattct taccaatcag acacatttta 60
 ttatttaaat ctgcacctct ctctatttta tttgccaggg gcacgatgtg acatatctgc 120
 agtcccagca cagtgggaca aaaagaattt agaccccaa agtgtcctcg gcatggatct 180
 tgaacagaac cagtatctgt catggaactg aacattcatc gatggtctcc atgtattcat 240
 ttattcactt gttcattcaa gtatttattg aatacctgcc tcaagctaga gagaaaagag 300
 agtgcgcttt ggaaatttat tccagttttc agcctacagc agattatcag ctcggtgact 360
 tttctttctg ccaccattta ggtgatggtg tttgattcag agatggctga atttctattc 420
 ttagcttatt gtgactgttt cagatctagt ttgggaacag attagaggcc attgtcctct 480
 gtcctgatca ggtggcctgg ctgtttcttt ggatccctct gtcccagagc caccagaagc 540
 cctgactctt gagaatcaag aaaacaccca gaaaggacct c 581

<210> 216
 <211> 281
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 37, 38, 164, 176, 254
 <223> n = A,T,C or G

<400> 216
 cogatgtcct gcttctgtgg accaggggct cctctgnngg tggcctcaac cacggctgag 60
 atccctagaa gtccaggagc tgtggggaag agaagcactt agggccagcc agccgggcac 120
 ccccaattgc gccccgacct acgctcacgc accagacctg ccnnggcggt cgctcnaaag 180
 ggogaattct gcagatatcc atcacactgg cggacgctcg agcatgcac tagagggcc 240
 aattcacct atantgagtc gtattacaat tcaactggccg t 281

<210> 217
 <211> 356
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 33, 322
 <223> n = A,T,C or G

<400> 217
 atagcagggt tcaacaattg tcttgtagtt tgnagtaaaa agacataaga aagagaaggt 60
 gtggtttgca gcaatcogta gttggtttct caccataccc tgcagttctg tgagccaaag 120
 gtcttgacaga aagttaaaat aaatcacaaa gactgctgtc atatattaat tgcataaaca 180
 cctcaacatt gctcagagtt tcatccgttt ggttaagaaa acattccttc aattcatcta 240
 tggcatttgt agtggcattg tegtctatga actcttgaag aagttctttg tattcagtct 300
 tagacacttg tggattgatt gncttggaag tcacattctc caataaggga cctcgg 356

<210> 218
 <211> 321
 <212> DNA
 <213> Homo sapiens

<400> 218
 ttgtccatcg ggagaaaggt gtttgtcagt tgtttcataa accagattga ggaggacaaa 60
 ctgctctgcc aatttctgga tttctttatt ttcagcaaac actttcttta aagcttgact 120
 gtgtgggcac tcatccaagt gatgaataat catcaagggt ttgttgcttg tcttggattt 180
 atatagagct tcttcatatg tctgagtgca gatgagttgg tcacccaac ctctggagag 240
 ggtctggggc agtttgggtc gagagtcctt tgtgtccttt ttggctccag gtttgactgt 300
 ggtatctctg gacctgcctg g 321

<210> 219
 <211> 271
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 41
 <223> n = A,T,C or G

<400> 219
 ccggttaggt ccacgcgggg gcagtggagg cacaggctca nggtggccgg gctacctggc 60
 accctatggc ttacaaagta gagttggccc agtttccttc cacctgaggg gagcactctg 120
 actcctaaca gtcttccttg ccttgccatc atctggggtg gctggctgtc aagaaaggcc 180
 gggeatgctt tctaaacaca gccacaggag gctttagagg catcttccag gtggggaaac 240
 agtcttagat aagtaagggt acttgtctaa g 271

<210> 220
 <211> 351
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 32, 43
 <223> n = A,T,C or G

<400> 220
 gtcctacgac gaggaccage ttttcttctt cnacttttcc canaacactc ggggtgcctcg 60
 cctgcccga tttgtctgact gggctcagga acaggagat gtccttgcca ttttatttga 120
 caaagagttc tgcgagtggg tgatccagca aatagggcc aaacttgatg ggaaaatccc 180
 ggtgtccaga gggtttctta tegtgaagt gttcacgctg aagcccctgg agtttggcaa 240

gccaacact ttggtctgtt ttgtcagtaa tctcttccca cccatgctga cagtgaactg 300
 gtagcatcat tccgtccctg tggaaggatt tgggcctact tttgtctcag a 351

<210> 221
 <211> 371
 <212> DNA
 <213> Homo sapiens

<400> 221
 gtctgcagaa gcgtgtctga ggtgtccggt ggaggtggca gccgagctct gggactaatc 60
 accgtgctgg ggacggcacc gcgtcaggat gcaggcagat ccctgcagaa gtgtctaaaa 120
 ttcacactcc tcttctggag ggacgtcgat ggtattagga tagaagcacc aggggacccc 180
 acgaacggtg tcgtcgaaac agcagccctt atttgcacac tgggagggcg tgacaccagg 240
 aaaaccacaa ttctgtcttt cacggggggc cactgtacac gtctctgtct gggcctcggc 300
 cagggtgccg agggccagca tggacaccag gaccagggcg cagatcacct tgttctccat 360
 ggtggacctc g 371

<210> 222
 <211> 471
 <212> DNA
 <213> Homo sapiens

<400> 222
 gtccatgttc catcattaat gttccaacat caccagggac acaaagctgc aaaaatgaga 60
 agggaaataa ggtagagaa aggatccggg caatcttaag gactgaggaa gacatgttcc 120
 ccaacccttg aactcacaaa ccctgaagct caaggattgc atccttccctc caaatctcac 180
 tcaacataat aagtgcagaa caacatgccca aagcaactgta tgaagcacta gggacaaaaga 240
 caaggtcaaaa atccttgtaa ccaaatttaa tggattgta atgcagtgtt aacacaggac 300
 agtaacagaa cacccaagaa ccaaacagaa gagggtaggg ataagcataa atgaagtaac 360
 atgaaataaaa cttccaaatg gaaaacttgt ccataccccc agggcaagtc aactacagtc 420
 tcccaaagga cataaattcc acttagggca cactagacag aaaacaatat t 471

<210> 223
 <211> 411
 <212> DNA
 <213> Homo sapiens

<400> 223
 agttgctcta caatgacaca caaatcccgt taaataaatt ataaacaagg gtcaattcaa 60
 atttgaagta atgttttagt aaggagagat tagaagacaa caggcatagc aaatgacata 120
 agctaccgat taactaatcg gaacatgtaa aacagttaca aaaataaacg aactctcctc 180
 ttgtcctaca atgaaagccc tcatgtgcag tagagatgca gtttcatcaa agaacaaaca 240
 tccttgcaaa tgggtgtgac gcggttccag atgtggattt ggcaaaacct catttaagta 300
 aaaggttagc agagcaaagt gcggtgcttt agctgctgct tgtgccgctg tggcgtcggg 360
 gaggtcctcg cctgagcttc cttccccagc tttgctgcct gagaggaacc a 411

<210> 224
 <211> 321
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 31

<223> n = A,T,C or G

<400> 224

```

gggtctgaagt ttgataacaa agaaatatat ntaagacaaa aatagacaag agttaacaat 60
aaaaacacaa ctatctgttg acataacata tggaaacttt ttgtcagaaa gctacatctt 120
cttaatctga ttgtccaaat cattaataaata tggatgattc agtgccattt tgccagaaat 180
togtttggct ggatcataga ttaacatttt cgagagcaaa tccaagccat tttcatccaa 240
gtttttgaca tgggatgcta ggcttcctgg tttccatttg ggaaatgtat tcttatagtc 300
ctgtaaagat tccacttctg g                                     321

```

<210> 225

<211> 251

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 34

<223> n = A,T,C or G

<400> 225

```

atgtctgggg aaagagttca ttggcaaaag tgtntctcca agaatggttt acaccaagca 60
gagaggacat gtcactgaat ggggaaaggg aacccccgta tccacagtca ctgtaagcat 120
ccagtaggca ggaagatggc tttgggcagt ggctggatga aagcagattt gagataccca 180
gctccggaac gaggtcatct tctacagggt cttccttcac tgagacaatg aattcagggt 240
gatcattctc t                                     251

```

<210> 226

<211> 331

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 26, 34, 35, 36, 37, 39

<223> n = A,T,C or G

<400> 226

```

gttaggtccc agggcccccg ccaagnnggt accnnnnntna ccaactcctga cccaaaaatc 60
aggcatggca ttaaaacggt gcaaattcct ttactgttat cccccccacc accaggacca 120
tgtagggtgc agtctttact ccctaaccg tttcccgaaa aagggtgctac ctcctttcca 180
gacagatgag agagggcagg acttcaggct ggatccacca ctgggctctc cctccccag 240
cctggagcac gggaggggag gtgacggctg gtgactgatg gatgggtagt gggctgagaa 300
gaggggacta ggaagggcta ttccaggctc a                                     331

```

<210> 227

<211> 391

<212> DNA

<213> Homo sapiens

<400> 227

```

aggtctgccc ttgaagtata ggaaggaatc atagttggag gacttctgca ttatttgttg 60
gctgaagcta gaagtgaac cccctcctga tttctgcagc aagatgaact gccttatccc 120
cagcccgag gaatgttcat atctgagcaa tcaatgggca ctgtgttcaa ccacgccatt 180

```

```
<210> 228
<211> 391
<212> DNA
<213> Homo sapiens
```

```
<400> 228
gttgtccata gccacctcct gggatagaag cttntagtt catagtccga ttagtgtgtc 60
cttaggacat aggtccagcc ctacagatta gctgggtgaa gaaggcaagt gtctcgacag 120
ggcttagtct ccacctcag gcatggaacc attcagggtg aagcctggga tgtgggcaca 180
ggagactcag gctgatataa aaataacaaa atcagtaata aaaaaattat aaaacctgtt 240
gcttgtctga atagatttga gcaacagtct tgcttttgtt aaaatcctgg agccgttaag 300
tcctgaatat tcttctggac atcattgctg gctggagaaa ggagccccag gcccggtctg 360
gctgacatct gtcaggtttg gaagtctcat c 391
```

```
<220>  
<221> misc_feature  
<222> 202  
<223> n = A,T,C or G
```

```
<210> 230
<211> 511
<212> DNA
<213> Homo sapiens
```

<400>	230						
gtccaagcca	aggaaaccat	tcccttacag	gagacctccc	tgtacacaca	ggaccgcctg	60	
gggctaagg	aaatggacaa	tgcaggacag	ctagtgtttc	tggctacaga	aggggaccat	120	
cttcagttgt	ctgaagaatg	gttttatgcc	cacatcatac	cattccttgg	atgaaacccg	180	
tatagttcac	aatagagctc	agggagcccc	taactcttcc	aaaccacatg	ggagacagtt	240	
tccctcatgc	ccaagcctga	gctcagatcc	agcttgcaac	taatccttct	atcatctaac	300	
atgcctact	tggaaagatc	taagatctga	atcttatcct	ttgccatctt	ctgttaccat	360	

```

atggtgttga atgcaagttt aattaccatg gagattgttt tacaaacttt tgatgtgggtc 420
aagttcagtt ttagaaaagg gagtctgttc cagatcagtg ccagaactgt gccagggccc 480
aaaggagaca actaactaaa gtagtgagat a 511

```

```

<210> 231
<211> 311
<212> DNA
<213> Homo sapiens

```

```

<400> 231
ggccaagta agctgtgggc aggcaagccc ttcggtcacc tgttggctac acagaccctt 60
cccctcgtgt cagctcaggc agctcgaggc ccccgaccaa cacttgcagg ggtccctgct 120
agttagcgcc ccacgcgcgt ggagttcgta ccgcttcctt agaacttcta cagaagccaa 180
gtccctgga gccctgttgg cagctctagc tttgcagtcg tgtaattggc ccaagtcatt 240
gtttttctcg cctcactttc caccaagtgt ctagagtcac gtgagcctcg tgtcatctcc 300
gggttgacc t 311

```

```

<210> 232
<211> 351
<212> DNA
<213> Homo sapiens

```

```

<400> 232
tcgttttagct aataatccct tccttgatga tacactocaa cttcttggtt ttctttatct 60
ctaaaaagcg gttctgtaac tctcaatcca gagatgttaa aaatgtttct aggcacggta 120
ttagtaaatc aagtaaatct catgtcctct taaaggacaa acttcagag atttgaatat 180
aaatttttat atgtgttatt gattgtcgtg taacaaatgg cccccacaaa ttagtagctt 240
aaaatagcat ttatgatgtc actgttttct ttgccttttc attaatgttc tgtacagacc 300
tatgtaaaca acttttgtat atgcatatag gatagctttt ttgaggggtat a 351

```

```

<210> 233
<211> 511
<212> DNA
<213> Homo sapiens

```

```

<400> 233
aggctctggat gtaaggatgg atgctctcta tacatgctgg gttggggatg ctgggactgc 60
acagccaccc ccagtatgcc gctccaggac tctgggacta gggcgccaaa gtgtgcaaatt 120
gaaaatacag gataccagg gaactttgaa ttccagattg tgaaaagaaa acaaatcttg 180
agactccaca atcaccaagc taaaggaaaa agtcaagctg ggaactgctt agggcaaaagc 240
tgctcccat tctattcaca gtcacccccc tgaggctcac ctgcatagct gattgcttcc 300
tttcccttat cgcttctgta aaaatgcaga ctactgagc cagactaaat tgtgtgttca 360
gtggaaggct gatcaagaac tcaaaagaat gcaacctttt gtctcttacc tactacaacc 420
aggaagcccc cacttaaggg ttgtcccacc ttactggact gaaccaagggt acatcttaca 480
cctactgatt gatgtctcat gtccccctaa g 511

```

```

<210> 234
<211> 221
<212> DNA
<213> Homo sapiens

```

```

<400> 234
caggtccagc gaaggggctt cataggctac accaagcatg tccacataac cgaggaagct 60
ctctccatca gcatagcctc cgatgacctt ggtgttccac aaagggttca tcttcgagcg 120

```

```
ccggctgtac atggccctgg tcagccatga atgaatagct ctaggactat agctgtgtcc 180
atctcccaga agctcctcat caatcaccat ctggccgaga c 221
```

```
<210> 235
<211> 381
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> 33
<223> n = A,T,C or G
```

```
<400> 235
ggtccaagaa agggacatct atgtgaaagt ganactgaga cagtgtgtgt cacaggtcat 60
gctgcagaat aatacattcc caggcactgt cacgtggggg acccaagagg ccccaggagt 120
gacctataac ctctccagaa agaccactct gtgtggcatc acagtccaca cagtttaagg 180
aaatattttag acttaacaat cagacaccag ctcttactca caattacact cacagcccac 240
acacaagtgt gcaaacatac acacacatat atatttctctg atacattcat ggaatatcag 300
agccctgccc tgaagtctgt agtgtctctg ctccccaac cgctgtctcc acattggcta 360
agctccctca agagacctca g 381
```

```
<210> 236
<211> 441
<212> DNA
<213> Homo sapiens
```

```
<400> 236
aggtcctgtt gcccctttct ttgcccacac ttgcgcattt gggaattgga atattttacc 60
aacacctgta ctgcattgaa tattggaagc aaataacttg gctttgatct tataggctca 120
cagatggagg aacgtacctt gaagttcaga tgagatttctg gacttttgag ttgatgctga 180
aacagcttga gatttttggg gactactgag agatgataat tgtattgtgc aatatgagaa 240
ggacatgaga ttgtgtgggc ataggtgtga aatgacattg ttgggatgtg ttaccctcc 300
aaatctcttg ttgaatgtga tcttaaacgt tgggtgtggg cctagtggaa ggtgttgaat 360
catgggggtg gactcttcat aatttgctta gctccatccc cttggtgatg agcaagtcct 420
tgctctgttg tgtcacatga g 441
```

```
<210> 237
<211> 281
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> 81, 90, 194, 209, 210, 211, 219, 233
<223> n = A,T,C or G
```

```
<400> 237
tctaaaaaaa ttagctgacc ttgttaaaaa tgttggcgtg agcagtatat tattacctat 60
ctttttttat tgtgtgtgtg ngtgtgtgtn ttaaactaat tggctgaaat atctgcctgt 120
ttccctcttt acatttttct tgtttcttct cttattttatc ttgttccatc ttgagatcta 180
ctgtaaagtg aatnttttaa tgaaaacann nccaagtnt actctcactg ggnttgggac 240
atcagatgta attgagaggg caacaggtaa gtcttcatgt c 281
```

<210> 238
 <211> 141
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 30, 85
 <223> n = A,T,C or G

<400> 238
 gtctgcctcc tcctactggt tccctctatn aaaaagcctc cttggcgag gttccctgag 60
 ctgtgggatt ctgcactggg gcttnggatt cctgatatg ttccttcaaa tccactgaga 120
 attaaataaa catcgctaaa g 141

<210> 239
 <211> 501
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 29, 30, 65, 86, 471, 489
 <223> n = A,T,C or G

<400> 239
 aacaatctaa acaaatccct cggttctann atacaatgga ttcccatat tggaaggact 60
 ctgangcttt attccccac tatgcntatc ttatcatttt attattatac acacatccat 120
 cctaaactat actaaagccc ttttcccatg catggatgga aatggaagat ttttttttaa 180
 cttgttctag aagtcttaat atgggctggt gccatgaagg cttgcagaat tgagtccatt 240
 ttctagctgc ctttattcac atagtgatgg ggtactaaaa gtactgggtt gactcagaga 300
 gtcgctgtca ttctgtcatt gctgctactc taacactgag caacactctc ccagtggcag 360
 atccccgtga tcattccaag aggagcattc atccctttgc tctaataatc aggaatgatg 420
 cttattagaa aacaaactgc ttgaccaggg aacaagtggc ttagcttaag naaacttggc 480
 tttgctcana tccctgatcc t 501

<210> 240
 <211> 451
 <212> DNA
 <213> Homo sapiens

<400> 240
 tgtcctgaaa ggccattact aatagaaaca cagcctttcc aatcctctgg aacatattct 60
 gtctggggtt ttaatgtctg tggaaaaaaa ctaaacaagt ctctgtctca gttaagagaa 120
 atctattggg ctgaagggtt ctgaacctct ttctgggtct cagcagaagt aactgaagta 180
 gatcaggaag gggctgcctc aggaaaaattc ctatagccta ggaattcagt gagaccctgg 240
 gaaggaccag catgctaatac agtgtcagtg aatccacagt ctttacttcc tgccatcataa 300
 agggccaggt ctccccagta ccaagtcctt tcctcatgaa gttgtgttgc ctcaggctgt 360
 ttagggacca ttgcctgtct tggtcacatg agtctgtctc cttacttttag tccctgggca 420
 atccttgcctt aatgcttttg ttgactcaac g 451

<210> 241
 <211> 411
 <212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 62, 82, 364, 370, 385

<223> n = A,T,C or G

<400> 241

```
aatctccagt gtgatggtat cgggggttaga gtttcaatct ccagtgtgat ggtactgcag 60
cnagagcttc aatctccagt gngatggtat taggggttaga ttttcaatct ccagtgtgat 120
ggtatcaggg ttagagcttc agcctccagt gtgatggtat caggggttaga gtttcagcct 180
ccagtgtgat ggtatcgggg ttagatcttc aatccccagt ggtggtggtt agagcttcaa 240
tctccagtgt gatggtattg ggggttagagc ttcaatctcc agtctgatgg tgtttcgga 300
tggggctttt aagatgtaat taggggttaa gatcataagg gacctggtct gatggggatt 360
agtncgcttn tatgaagaga cacangaggg cttgctctat ctctgactct c 411
```

<210> 242

<211> 351

<212> DNA

<213> Homo sapiens

<400> 242

```
ttcccccttca caacagtaga gacctacaca gtgaactttg gggacttctg agatcagcgt 60
cctaccaaga cccagccca actcaagcta cagcagcagc acttcccaag cctgctgacc 120
acagtcacat caccatcag cacatggaag gcccctggta tggacactga aaggaagggc 180
tggtcctgcc cttttgaggg ggtgcaaaca tgactgggac ctaagagcca gaggctgtgt 240
agaggtcct gctccacctg ccagtctcgt aagaaatggg gttgctgcag tgttgagta 300
ggggcgagagg gagggagcca aggtcactcc aataaaacaa gctcatggca c 351
```

<210> 243

<211> 241

<212> DNA

<213> Homo sapiens

<400> 243

```
gtctgtgctt tatcaggaaa agcacaagaa tatgtttttc tacctaaaac cctcttctac 60
tttaaaaatg gtttgctgaa tttttctatg tttttaaaat gtttttatgc ttttttttaa 120
acacgtaaag gatggaacct aatcctctcc cgagacgcct cttttgtgtt aatgcctatt 180
cttacaacag agaaacaagt acattaatat aaaaacgagt tgattattgg ggtataaaat 240
a 241
```

<210> 244

<211> 301

<212> DNA

<213> Homo sapiens

<400> 244

```
ggtccagagc aatagcgtct gtggtgaagc gcctgcactc ctcgaggagac atgcctggct 60
tatatgctgc atccacataa ccatagataa aggtgctgcc ggagccacca atggcaaaag 120
gctgtcgagt cagcattcct cccagggttc catatacctg acctccttca cgttgggtccc 180
agccagctac catgagatgt gcagacaagt cctctcgata tttatagctg atatttctca 240
ccacatttgc agcagccaaa acaagtggag gttcctccag ttctatccca tggagctcca 300
g 301
```


<210> 245
 <211> 391
 <212> DNA
 <213> Homo sapiens

<400> 245
 ctgacactgc tgatgtgggc cgggggggcgc cgaggcacaa ctggtggccg gaccattgag 60
 gcacctggag ggtaggcagc ttgtgggtgca gacaccacag agagagaaaa gttggatgga 120
 gtggtgggaa taatcagggt ggcacactgt gcctagaagc ttccagggcc accaagagaa 180
 tggaaggga aactacaaca ttcacaacag aaataggagt caattcactt agaccagaa 240
 ctccagaaag ggggagtgtg ggaatctaca atttcaaagc cagctcgtgt ctacctagag 300
 ccccaaactg cataagcacc aggattgtac accttagtcc ctcaagatag tttcaagtga 360
 gcgtgcaatt cactcttaca gaggagggcc t 391

<210> 246
 <211> 291
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 26, 80, 82, 185, 255, 259
 <223> n = A,T,C or G

<400> 246
 tcctccacag gggaagcagg aagttngacc agcttcaggc tggaacgtgc ccagggcaca 60
 gagctggcaa ggtgcaaagn cntctgcaga atattcacca ggttgacaca gacctccaca 120
 ttcagacata ttccaagctt ctggggtctt cagggcccca gaatttcctg gtcttgggca 180
 tggtnacaaa gtcatttgtc ctctctcatt ttggaaggtt ccatttggac ataaaatgca 240
 agcgttctcg tgctncatna taataggtcc cagcctgcac tgacacattt g 291

<210> 247
 <211> 471
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 80, 110, 125, 245, 249, 279, 318, 336, 339, 455, 471
 <223> n = A,T,C or G

<400> 247
 cactgagtga atgagtatat aatttatgaa aacagaaaag tgctttggaa aaaaaaaaaag 60
 acaacaggag tacatacagn gaacccaaaa gagtgtacca ggaggagcan accctgaaca 120
 gttanaacta tggaaatcgc tatgctttgt gttgtcacag gagttaaaat aggaataccc 180
 tgcatacaat aaatatattat tggataaata actaagcctg ataccctttt caatgcgtta 240
 tacanactnt atcatcacac cactaatcta agttctcana agttaaacat tacaagactt 300
 cagaacaaca taggcgtntt tggctccatt taacanaana aggaccatag tgatcattta 360
 atctctatga gtctgtctta tcttctggaa aaggggccta acaccatttc cttttgcaaa 420
 aaggtagctg ccttgcttcc agttctacca tcctntagca acccatcttt n 471

<210> 248
 <211> 551
 <212> DNA

<213> Homo sapiens

<400> 248

```
ccatgggatac aggaatgggg tcaggtcagt tgacctgagc ataccatta aacatgttca 60
aatgtcccca tcccacccac tcacatgaca tggctcccga gccctgagat ctgtatccca 120
agaacctcag ttgagaaata tttatggcag cttcactgtt gctcaagagc ctgggtattg 180
tagcagcctg ggggcagggt gtccctaagt ttctccaagt tcttcacatc agccagaatc 240
ccatctatgc ttgtctccag caaatggagg tggeccctct gctgacgtgc cctctcttcc 300
agctctgaca tcatgggccc cagttggctg ttgatctggg tcttggtcgc ggaaagcttc 360
tgctccagta agaccagccc ctcttcatct aactgagag gctgggccat cagatgcagg 420
aggccgtcta atgtgttgag tgtgtcttgg attgtaacct cagcgttctt ggctctggta 480
tcaaccttct gggtctctgt aatcaccatc tgtactgcat ccatattcgt gtcgaactcc 540
agtccttcc t 551
```

<210> 249

<211> 181

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 3, 96

<223> n = A,T,C or G

<400> 249

```
atntccagag ggaccgtaag actggtacaa gtttacacca taagaggcga cgtggtcagc 60
cacaatgtct tcacctccac aggggctcat cacgngggtc agggcaaggc cccccagcat 120
cagagctttg tttaggatca tctcttccc aaggcagcct tagcagttgc tgacctgccc 180
g 181
```

<210> 250

<211> 551

<212> DNA

<213> Homo sapiens

<400> 250

```
tctgtagcta ggatgagctg gctctcaagc aaaagtttgt cttcctgggt ccatttgtgg 60
ttatcacttg ttattgaatg tacatcaca attaaagtct gcattgttgg acgtaagaga 120
atgtgccgac ttggttaacc aggagatttc atgttactgg actgcctgta gtcacgtatt 180
tctgctatga cacatccgca atgaaaaata ttaacctgag atttttctag gagatcaacc 240
aaaataggag gtaattcttc tgcattccaa tattcaagca actctccttc ttcattagggc 300
agtcgaatgg tctcggaatc tgatccgttt tttccctga gcatcagaga atatccctca 360
tttcttgggt atagattgac cactaaacat gacaaagtct cttgcataac aagcttctct 420
aacaagttca catttcttct taatttctta acttcagggt ctttttcaca ttcttcaata 480
tacaagtcac aaagtttttg aaatacagat tttcttccac ttgataggta tttcctttta 540
ggaggtctct g 551
```

<210> 251

<211> 441

<212> DNA

<213> Homo sapiens

<400> 251

```
tgctgctct cccatcctgg ttactatgag tcgctcttgg cagaaaggac cacagatgga 60
```

```

gagcttggca ctcgctccaa ctttgccgaa aagaggacaa ccaccaaagt agtaggtaaa 120
aacacaatth tagcagcagt gaaataaaaa gaggaagtga ggatggggcc aggccgcaac 180
tataattaaa ctgtctgttt aggagaagct gaatccagaa gaaacacaag ctgtaaagtg 240
agagaggaca gggagcaggg cttttggaga gcaggagagg acaggctgtc accaagcgct 300
gctcggactc tgccctgaaa gatttgaatt ggacactgtc cagtcacgtg tgtggcaaac 360
cgtactccaa gcacttttct cacggcagag gaaggagctg ccatggctgt acccctgaac 420
gtttgtgggg ccagcgatgt g                                     441

```

<210> 252

<211> 406

<212> DNA

<213> Homo sapiens

<400> 252

```

tttttttttg aacaagtaaa aatttcttta tttgctgaca ataagataac ctacagggaa 60
aacctgatga aatctattaa aaagtacta aaactaataa aagaatttag gaaggttata 120
gaatgtaaga ccaagacaca aaaatcaatt acatttctat ataatagcaa tgaacagata 180
ctgaaattht aaaaactaaa tcattttaca aaagtatcac aatatgaaac actccgggat 240
aaattggata aaagatgtgc aagactgtac aaaagctaca aaacatttat gaaggaaatt 300
ggaagataga aacaagatag aaaatgaaaa tattgtcaag agtttcagat agaaaatgaa 360
aaacaagcta agacaagtat tggagaagta tagaagatag aaaaat                                     406

```

<210> 253

<211> 544

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 224

<223> n = A,T,C or G

<400> 253

```

gaaggagtgc agtagcaaa gtcacacctgt ccaattccct gagctttgct cactcagcta 60
atgggatggc aaagggtggt gtgctttcat cttcaggcag aagcctctgc ccatccccct 120
caagggtctg aggccagtt ctcatgtctg ccttgggtgg gcatctgtta acagaggaga 180
acgtctgggt ggcggcagca gctttgctct gactgcctac aaanctaag cttggtgcta 240
gaaacatcat cattattaaa cttcagaaaa gcagcagcca tggtcagtca ggctcatgct 300
gcctcactgc ttaagtgcct gcaggagccg cctgccaagc tccccttcct acacctggca 360
cactggggtc tgcacaaggc tttgtcaacc aaagacagct tccccctttt gattgcctgt 420
agactttgga gccaaagaa actctgtgtg actctacaca cacttcaggt ggtttgtgct 480
tcaaagtcac tgatgcaact tgaaaggaaa cagtttaatg gtggaaatga actaccattt 540
ataa                                     544

```

<210> 254

<211> 339

<212> DNA

<213> Homo sapiens

<400> 254

```

tggcattcag ggcagtgtct tctgcatctc ctaggaacct cgggagcggc agctccggcg 60
cctggtagcg agaggcgggt tccggagatc ccggcctcac ttcgtccac tgtggttagg 120
ggtgagtcct gcaaatgtta agtgatttgc tcaagggtgcc catttcgcag gaattggagc 180
ccaggccagt tctctgagcc tatcattagg gctaaaggag tgcgtgatca gaatggtgtc 240

```

```
tggacgggttc tacttgctct gcttgcctgt ggggtccctg ggctctatgt gcatcctctt 300
cactatctac tggatgcagt actggcgtgg tggctttgc 339
```

```
<210> 255
<211> 405
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> 11, 39, 70, 87, 103, 120, 177, 181, 220, 229, 233, 341, 345,
366, 380, 402
<223> n = A,T,C or G
```

```
<400> 255
gagggtttttt nttttttttt tttttttttt caattaaana tttgatttat tcaagtatgt 60
gaaaacattt tacaatggaa acttttntta aatgctgcat gtnctgtgct atggaccacn 120
cacatacagc catgctgttt caaaaaactt gaaatgccat tgatagttaa aaaactntac 180
ncccgatgga aaatcgagga aaacaattta atgtttcatn tgaatccana ggngcatcaa 240
attaaatgac agctccactt ggcaataaat agctgttact tgatgggtatc caaaaaaaaa 300
tggttgggga tggataaatt caaaaatgct tccccaaagg ngggnggttt ttaaaaagtt 360
tcaggncaca acccttgcan aaaacactga tgcccaacac antga 405
```

```
<210> 256
<211> 209
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> 6
<223> n = A,T,C or G
```

```
<400> 256
gggcangtct ggtcctctcc ccacatgtca cactctcttc agcctctccc ccaaccctgc 60
tctccctcct cccctgccct agcccaggga cagagtctag gaggagcctg gggcagagct 120
ggaggcagga agagagcact ggacagacag ctatggtttg gattggggaa gaggttagga 180
agtaggttct taaagaccct tttttagta 209
```

```
<210> 257
<211> 343
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> 306, 311, 343
<223> n = A,T,C or G
```

```
<400> 257
tctggacacc ataatccctt ttaagtggct ggatggtcac acctctccca ttgacaagct 60
gggttaagtc aataggttga ctaggatcaa cagacccaa atcaataaga tactgcagtc 120
tattgagact caaaggctta tactggcgtc tgaaactatg tccttcgtta aaccctgatt 180
ttgggattcg gatgtaaaat ggagtctggc ctccctcaaa gcccaagcgg ggccgggttc 240
```

```
ctctttgcct ttctccttta tggcctctgc cacatcttct acctcttctc cgacctcttg 300
gtcttntctc nggtttcttg gagccgggat tcggctttaa gtn 343
```

<210> 258

<211> 519

<212> DNA

<213> Homo sapiens

<400> 258

```
gcggtcttctg acttctagaa gactaaggct ggtctgtgtt tgcttgtttg cccacctttg 60
gctgataccc agagaacctg ggcacttgct gcctgatgcc caccctgcc agtcattcct 120
ccattcaccc agcgggaggt gggatgtgag acagcccaca ttggaaaatc cagaaaaccg 180
ggaacaggga ttgcccctc acaattctac tcccagatc ctctcccctg gacacaggag 240
acccacaggg caggacccta agatctgggg aaaggaggct ctgagaacct tgaggtacct 300
ttagatcctt ttctaccac ttctctatgg aggattccaa gtcaccactt ctctcaccgg 360
cttctaccag ggtccaggac taaggcggtt tctccatagc ctcaacattt tgggaatctt 420
cccttaatca cccttgctcc tctgggtgct ctggaagatg gactggcaga gacctctttg 480
ttgcgttttg tgctttgatg ccagggaatgc cgcctagtt 519
```

<210> 259

<211> 371

<212> DNA

<213> Homo sapiens

<400> 259

```
attgtcaact atatacacag tagtgaggaa taaaatgcac acaaaacaat ggatagaata 60
tgaaaatgtc ttctaaatat gaccagtcta gcatagaacc ttcttctctt ccttctcagg 120
tcttccagct ccatgtcatc taaccacatt aacaaacgtg gacgtatgc ttccagaggc 180
cgtcttaaca actccatttc caaaagtcac ctccagaaga catgtatttt ctatgatttc 240
ttttaaaca atgagaattt acaagatgtg taactttcta actctatttt atcatacgtc 300
ggcaacctct ttccatctag aagggtctaga tgtgacaaat gttttctatt aaaagggttg 360
ggtggagttg a 371
```

<210> 260

<211> 430

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 57, 189, 208, 256, 426

<223> n = A,T,C or G

<400> 260

```
ttggattttt tgacttgcca ttctcagtttt ttactttttt tttttttttt ttttganaaa 60
tactatatatt attgtcaaag agtggtacat aggtgagtg tcatcttccc tctcatgccc 120
gtatactctg ctctcgtgtt tcagtaaaag ttttccgtag ttctgaacgt cccttgacca 180
caccataana caagcgcaag tcactcanaa ttgccactgg aaaactggct caactatcat 240
ttgaggaaaag actganaaag cctatcccaa agtaatggac atgcaccaac atcgcggtac 300
ctacatgttc ccgtttttct gccaatctac ctgtgtttcc aagataaatt accacccagg 360
gagtcacttc ctgctatgtg aacaaaaacc cggtttcttt ctggagggtgc ttgactactc 420
tctcngnagc 430
```

<210> 261

<211> 365
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 178
 <223> n = A,T,C or G

<400> 261
 tcctgacgat agccatggct gtaccactta actatgattc tattccaact gttcagaatc 60
 atatcacaaa atgacttgta cacagtagtt tacaacgact cccaagagag gaaaaaaaaa 120
 aaaaaagacg cctcaaaatt cactcaactt ttgagacagc aatggcaata ggcagcanag 180
 aagctatgct gcaactgagg gcacatatca ttgaagatgt cacaggagtt taagagacag 240
 gctggaaaaa atctcatact aagcaaacag tagtatctca taccaagcaa aaccaagtag 300
 tatctgctca gcctgccgct aacagatctc acaatcacca actgtgcttt aggactgtca 360
 ccaaa 365

<210> 262
 <211> 500
 <212> DNA
 <213> Homo sapiens

<400> 262
 cctagatgtc atttgggacc cttcacaaacc attttgaagc cctgtttgag tccctgggat 60
 atgtgagctg tttctatgca taatggatat tcgggggttaa caacagtccc ctgcttggct 120
 totattctga atccttttct ttcaccatgg ggtgcctgaa ggtggtctga tgcataatgg 180
 acaatggcac ccagtgtaaa gcagctacaa ttaggagtgg atgtgttctg tagcatccta 240
 tttaaataag cctattttat cctttggccc gtcaactctg ttatctgctg cttgtactgg 300
 tgctgtact tttctgactc tcattgacca tattccacga ccatgggtgt catccattac 360
 ttgatcctac tttacatgtc tagtctgtgt ggttgggtgt gaataggctt ctttttacat 420
 ggtgctgcca gccagctaa ttaatggtgc acgtggactt ttagcaagcg ggctcactgg 480
 aagagactga acctggcatg 500

<210> 263
 <211> 413
 <212> DNA
 <213> Homo sapiens

<400> 263
 ctacagagagg ttgaaagatt tgcctacgaa agggacagtg atgaagctaa gctctagatc 60
 caggatgtct gacttcaaat tgaaactccc aaagtaatga gtttgggaagg gtgggggtgtg 120
 gcctttccag gatgggggtc ttttctgtct ccagcggata gtgaaacccc tgtctgcacc 180
 tggttggggc tggtgttttc ccaaagggtt tttttttagg tccgtcgtct tcttgtggat 240
 taggcattat tatctttact ttgtctccaa ataacctgga gaatggagag agtagtgacc 300
 agctcagggc cacagtgcga tgaggaccat ctctcacct ctctaaatgc aggaagaaac 360
 gcagagtaac gtggaagtgg tccacaccta ccgccagcac attgtgaatg aca 413

<210> 264
 <211> 524
 <212> DNA
 <213> Homo sapiens

<400> 264

```

tccaatgggg ccctgagagc tgtgacagga actcacactc tggcactggc agcaaaacac 60
cattccaccc cactcatcgt ctgtgcacct atgttcaaac tttctccaca gttccccaat 120
gaagaagact catttcataa gtttgtggct cctgaagaag tcctgccatt cacagaaggg 180
gacattctgg agaaggtcag cgtgcattgc cctgtgtttg actacgttcc cccagagctc 240
attaccctct ttatctccaa cattgggtggg aatgcacctt cctacatcta ccgcctgatg 300
agtgaactct accatcctga tgatcatggt ttatgacoga ccacacgtgt cctaagcaga 360
ttgcttaggc agatacagaa tgaagaggag acttgagtgt tgctgctgaa gcacatcctt 420
gcaatgtggg agtgcacagg agtccaccta aaaaaaaaaa tccttgatac tgttgctgctg 480
cttttagtgc accccgtaac aagggcacac atccaggact gtgt 524

```

<210> 265

<211> 344

<212> DNA

<213> Homo sapiens

<400> 265

```

tcctttcttc tacttcagga gatgattcaa agttacttgt ggacatttct ttaagttctg 60
aagacaaatg agacaggatt tggcctgcgg gttcttcaga cttctctacc acctccatta 120
actcttcacg ttggcttgac gtaggcaatg cactattttg ctcttttgtt tctggagatg 180
accagcacc acttctttct cttggcgggg ttctaagtgt gtctttgaat accagtgaag 240
actcaggcct atcctgtact ggaaaggac taaatttgtc tttctgtcta ggaggtgatg 300
cagtagcatc ctctgaggg ggtaaggcca ttttctcttt ttga 344

```

<210> 266

<211> 210

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 78

<223> n = A,T,C or G

<400> 266

```

ccacaatgtc cataacttga gcaggctttg gcatcccacc acccccttca gaccaatata 60
cactatgttg gaggaacnac tttaaaatgt aaaatgagaa atgggcactg aacactccat 120
cctcactccc aacagccac ccacacacct cttcaactgc tatccaaaca tggaggagct 180
cttgtggaag agaggctcaa caccaaataa 210

```

<210> 267

<211> 238

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 5, 19, 31

<223> n = A,T,C or G

<400> 267

```

tcggnccctc caccctctna ctgaaattct ntgaaattct cccctttggg atgaggatgg 60
caacccaggg catgtacct cccaacctgg gaccgacct aataccctaa catcctgctg 120
acagtggctg ttctcgctgg gcaggcgtcc caaagcacat cgagccagat tcaggcagag 180
tggaactggc cctcagcca tcagtggagg tggcctggga ggctctacc tgaacggg 238

```

<210> 268
 <211> 461
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 459
 <223> n = A,T,C or G

<400> 268
 tcctcaagga catgcccctt gatagaaact cagttcctgt ctccagttcc ctccctggacc 60
 tgatccccc aatgcagggc ctgggactat atccagttcc ttattttcag aggcccatgc 120
 acaagatgca cagcaaataa gtgctgaata aagaccacgc tactgctagc ttaccctgct 180
 ccaaacattc accaagtcct cagcaaagag ggccatccat tcacctcttc taaaaacaca 240
 ctgagctccc cagtctatac cccaagatat gcttggtccc caactatccc tcctctctca 300
 tctccaagcc agtttcccct ttctaagtat actgatatta ccaaagacac tgacaatctt 360
 cttttcctac ctctcccag tgactagggt tgcagcagga gctctataag tcttagtata 420
 cagcagaagc tccataaatg tgtgctgacc taacattang c 461

<210> 269
 <211> 434
 <212> DNA
 <213> Homo sapiens

<400> 269
 ctgtgttggg gagcaccgat tcccactcaa tatggcgtgg cttacagtct tcattagggt 60
 cccgctccca accagaatga ggaatgatca cttcatctgt caaggcatgc agtgcattgg 120
 ccacaatctc cattttgatt gagtcatggg atgaaagatt ccacagggtt ccggtataaa 180
 cttcagtaag gtccatatca cgagcctttc gaagcaatcg cacaagggca ggcacaccat 240
 cacagttttt tatggcaatc ttgttatcct ggtcacgtcc aaaagagata ttcttgagag 300
 ctccacaggc tccaaggtgc acttcctttt tgggatggtc taacaatccc accagtactg 360
 ggatgccctt gagcttccgc acgtcagtct tcacctgtc attgcggtag cataagtgtt 420
 gcaggtatgc aaga 434

<210> 270
 <211> 156
 <212> DNA
 <213> Homo sapiens

<400> 270
 ctgcaccagc gattaccagt ggcattcaaa tactgtgtga ctaaggattt tgtatgctcc 60
 ccagtagaac cagaatcaga caggtatgag ctagtcaaca gcaagtcttt gttggattcg 120
 agtaggetca ggatctgctg aaggtcggag gaggta 156

<210> 271
 <211> 533
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 100, 137, 383, 385, 411

<223> n = A,T,C or G

<400> 271

```
ccactgtcac ggtctgtctg acacttactg ccaaacgcat ggcaaggaaa aactgcttag 60
tgaagaactt agaagctgtg gagaccttgg ggtccacgtn caccatctgc tctgataaaa 120
ctggaactct gactcanaac cggatgacag tggcccacat gtggtttgac aatcaaattcc 180
atgaagctga tacgacagag aatcagagtgt gtgtctcttt tgacaagact tcagctacct 240
ggcttgctct gtccagaatt gcaggtcttt gtaacagggc agtgtttcag gctaaccagg 300
aaaacctacc tattcttaag cgggcagttg caggagatgc ctctgagtca gcactcttaa 360
agtgcataga gctgtgctgt ggntnctgtg aggagatgag agaaagatac nccaaaatcg 420
tcgagatacc cttcaactcc accaacaagt accagttgtc tattcataag aacccaaca 480
catcggagcc ccaacacctg ttggtgatga agggcgcccc agaaaggatc cta 533
```

<210> 272

<211> 630

<212> DNA

<213> Homo sapiens

<400> 272

```
tggtattttt ctttttcttt tggatgtttt atactttttt ttcttttttc ttctctattc 60
ttttcttcgc ctcccgtag ttctgtcttc cagttttcca cttcaaactt ctatcttctc 120
caaattgttt catctacca ctcccaatta atctttccat ttctgtctgc gtttagtaaa 180
tgcgttaact aggttttaaa tgacgcaatt ctccctgcgt catggatttc aagggtcttt 240
aatcaccttc ggtttaatct ctttttaaaa gatcgctctc aaattatttt aatcacctac 300
aacttttaaa ctaaacttta agctgtttta gtcaccttca ttttaattct aaagcattgc 360
ccttctattg gtattaattc ggggctctgt agtcctttct ctcaattttc ttttaaatac 420
attttttact ccatgaagaa gcttcatctc aacctccgtc atgtttttag aaccttttat 480
cttttccttc ctcatgctac tcttctaagt cttcatattt tctcttaaaa tcttaagcta 540
ttaaaattac gttaaaaact taacgctaag caatatctta gtaacctatt gactatattt 600
tttaagtagt tgtattaatc tctatctttc 630
```

<210> 273

<211> 400

<212> DNA

<213> Homo sapiens

<400> 273

```
tctggtttgc cctccagttc attctgaatc tagacttgct cagcctaatc aagttcctgt 60
acaaccagaa gcgacacagg ttcttttggg atcatccaca agtgaggggt acacagcatc 120
tcaacccttg taccagcctt ctcatgctac agagcaacga ccacagaagg aaccaattga 180
tcagattcag gcaacaatct ctttaaatac agaccagact acagcatcat catcccttcc 240
tgctgctgtc cagcctcaag tatttcaggc tgggacaagc aaacctttac atagcagtg 300
aatcaatgta aatgcagctc cattccaatc catgcaaagc gtgttcaata tgaatgcccc 360
agttcctcct gttaatgaac cagaaacttt aaaacagcaa 400
```

<210> 274

<211> 351

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 2

<223> n = A,T,C or G

<400> 274
 tntgagtatg tcccagagaa ggtgaagaaa gcggaaaaga aattagaaga gaatccatat 60
 gaccttgatg cttggagcat tctcattcga gaggcacaga atcaacctat agacaaagca 120
 cggaagactt atgaacgcct tgttgcccag ttccccagtt ctggcagatt ctggaaactg 180
 tacattgaag cagagggttac tattttattt tattttttct tatatcagta ttgcagcatt 240
 cactgtagtg atagaaaaca agttaggaac atagccaatt aggacaagga ggattttaat 300
 gtgtccttacc tttattttgt aaaataggtta taaaggagta attaaaatga a 351

<210> 275
 <211> 381
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 4, 11, 12, 13
 <223> n = A,T,C or G

<400> 275
 gcngggtcgc nncgaggtc tgagaagccc ataccactat ttgttgagaa atgtgtggaa 60
 tttattgaag atacagggtt atgtaccgaa ggactctacc gtgtcagcgg gaataaaact 120
 gaccaagaca atattcaaaa gcagtttgat caagatcata atatcaatct agtgtcaatg 180
 gaagtaacag taaatgctgt agctggagcc cttaaagctt tctttgcaga tctgccagat 240
 cctttaattc catattctct tcatccagaa ctattggaag cagcaaaaat cccggataaa 300
 acagaacgtc ttcatgcctt gaaagaaatt gtaagaaat ttcatcctgt aaactatgat 360
 gtattcagat acgtgataac a 381

<210> 276
 <211> 390
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 5
 <223> n = A,T,C or G

<400> 276
 gctcngactc cggcgaggacc tgctcggagg aatggcgccg ccgggttcaa gcactgtctt 60
 cctgttggcc ctgacaatca tagccagcac ctgggctctg acgcccactc actacctcac 120
 caagcatgac gtggagagac taaaagcctc gctggatcgc cctttcacia atttggaatc 180
 tgccttctac tccatcgttg gactcagcag ccttggtgct caggtgccag atgcaaagaa 240
 agcatgtacc tacatcagat ctaaccttga tcccagcaat gtggattccc tcttctacgc 300
 tgcccaggcc agccaggccc tctcaggatg tgagatctct atttcaaag agaccaaaga 360
 tctgcttctg gcagacctcg gccgcgacca 390

<210> 277
 <211> 378
 <212> DNA
 <213> Homo sapiens

<400> 277
 tgggaacttc tggggtagga cgttgtctgc tatctccagt tccacagacc caaccagtta 60

```

cgatggtttt ggaccattta tgccgggatt cgacatcatt ccctataatg atctgcccgc 120
actggagcgt gctcttcagg atccaaatgt ggctgcgttc atggtagaac caattcaggg 180
tgaagcaggc gttgttggtc cggatccagg ttacctaatg ggagtgcgag agctctgcac 240
caggcaccag gttctcttta ttgctgatga aatacagaca ggattggcca gaactggtag 300
atggctggct gttgattatg aaaatgtcag acctgatata gtcctccttg gaaaggccct 360
ttctgggggc ttataccc 378

```

```

<210> 278
<211> 366
<212> DNA
<213> Homo sapiens

```

```

<400> 278
ggagggcaca ttctttttca cctcagagtc ggtcggggaa ggccacccag ataagatttg 60
tgaccaaacc agtgatgctg tccttgatgc ccaccttcag caggatcctg atgccaaagt 120
agcttgtgaa actgttgcta aaactggaat gatccttctt gctggggaaa ttacatccag 180
agctgctgtt gactaccaga aagtgggtcg tgaagctgtt aaacacattg gatatgatga 240
ttcttccaaa ggttttgact acaagacttg taacgtgctg gtagccttgg agcaacagtc 300
accagatatt gctcaagggtg ttcattctga cagaaatgaa gaagacattg gtgctggaga 360
ccaggg 366

```

```

<210> 279
<211> 435
<212> DNA
<213> Homo sapiens

```

```

<400> 279
cctaagaact gagacttggtg acacaaggcc aacgacctaa gattagccca gggttgtagc 60
tggaagacct acaacccaag gatggaaggc ccctgtcaca aagcctacct agatggatag 120
aggacccaag cgaaaaagat atctcaagac taacggcccg aatctggagg cccatgacct 180
agaacccagg aaggatagaa gcttgaagac ctggggaaat cccaagatga gaacctaaa 240
ccctacctct tttctattgt ttacacttct tactcttaga tatttccagt tctcctgttt 300
atctttaagc ctgattcttt tgagatgtac tttttgatgt tgccgggttac ctttagattg 360
acaagtatta tgcttgccca gtcttgagcc agctttaaat cacagctttt acctatttgt 420
taggctatag tgttt 435

```

```

<210> 280
<211> 435
<212> DNA
<213> Homo sapiens

```

```

<400> 280
tctggatgag ctgctaaactg agcacaggat gacctgggac ccagcccagc cccccgaga 60
cctgactgag gccttctctgg caaagaagga gaaggccaag gggagccctg agagcagctt 120
caatgatgag aacctgcgca tagtggtggg taacctgttc cttgccggga tggtagaccac 180
ctcgaccacg ctggcctggg gccctcctgct catgatccta cacctggatg tgcagcgtga 240
gccagacctc gtccggggcg ccgctcgaaa ttccagcaca ctggcgggcg ttactagtgg 300
atccgagctc ggtaccaagc ttggcgtaat catggtcata gctgtttcct gtgtgaaatt 360
gttatccgct cacaattcca cacaacatac gagccggaag cataaagtgt aaagcctggg 420
gtgcctaagt agtga 435

```

```

<210> 281
<211> 440
<212> DNA

```

<213> Homo sapiens

<400> 281

```
catctgatct ataaatgcgg tggcatcgac aaaagaacca ttgaaaaatt tgagaaggag 60
gctgctgaga tgggaaaggg ctccctcaag tatgcctggg tcttgataa actgaaagct 120
gagcgtgaac gtggtatcac cattgatata tccttgtgga aatttgagac cagcaagtac 180
tatgtgacta tcattgatgc cccaggacac agagacttta tcaaaaacat gattacaggg 240
acatctcagg ctgactgtgc tgtcctgatt gttgctgctg gtgttggtga atttgaagct 300
ggtatctcca agaatgggca gacccgagag catgcccttc tggcttacac actgggtgtg 360
aaacaactaa ttgtcgggtg taacaaaatg gattccactg agccccctac agccagaaga 420
gatatgagga aattgttaag 440
```

<210> 282

<211> 502

<212> DNA

<213> Homo sapiens

<400> 282

```
tctgtggcgc aggagcccc tcccccgga gctctgacgt ctccaccgca gggactgggtg 60
cttctcggag ctccactcc tcagactccg gtggaagtga cgtggacctg gatccactg 120
atggcaagct cttcccagc gatggttttc gtgactgcaa gaagggggat cccaagcacg 180
ggaagcggaa acgaggccgg ccccgaagc tgagcaaaga gtactgggac tgtctcgagg 240
gcaagaagag caagcacgcg cccagaggca cccacctgtg ggagtccatc cgggacatcc 300
tcatccaccc ggagctcaac gagggcctca tgaagtggga gaatcggcat gaaggcgtct 360
tcaagttcct gcgctccgag gctgtggccc aactatgggg ccaaaagaaa aagaacagca 420
acatgacctc cgagaagctg agccgggcca tgaggtacta ctacaaacgg gagatcctgg 480
aacgggtgga tggccggcga ct 502
```

<210> 283

<211> 433

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 130, 147, 221, 225, 242, 246, 261, 279, 292, 294, 298, 314, 323, 332, 339, 342, 343, 350, 351, 356, 361, 362, 368, 372, 375, 379, 380, 382, 387, 390, 392, 394, 401, 404, 406, 409, 413, 423, 431, 433

<223> n = A,T,C or G

<400> 283

```
ccatattaga ttactggaac atctaagcat cagtgtgtga ccatgcgaac aaaagacttc 60
ggggagtgtc tattttttaa aaggtttatg tgtgtcgagg cagttgtaaa agatttactg 120
cagaatcaan cccactttta ggcttangac caggttctaa ctatctaaaa atattgactg 180
ataacaaaaa gtgttctaaa tgtggctatt ctgatccata nttgnttttt aaagaaaaaa 240
antgntata cagaaagagt ntaaaagttc tgtgaattna atgcaaatta gncnccantc 300
ttgacttccc aanacttga ttnatacctt tnactcctnt cnnttctctg ncttctntaa 360
nntcaatnat tnggnagtnn anggcctcn gnanaacacc nttncncgnt cncgcgaatc 420
canccgcctt nan 433
```

<210> 284

<211> 479

<212> DNA

<213> Homo sapiens

<400> 284

```
tctggaagga tcagggatct gagcaaagcc aagtttactt aagctaagcc acttgttcct 60
gggtcaagca gtttggttttc taataagcat cattcctgat cattagagca aagggatgaa 120
tgctcctctt ggaatgatac aggggatctg ccactgggag agtggtgctc agtggttagag 180
tagcagcaat gacagaatga cagcgactct ctgagtcaac ccagtacttt tagtaccctg 240
tcactatgtg aataaaaggca gctagaaaat ggactcaatt ctgcaagcct tcatggcaac 300
agcccatatt aagacttcta gaacaagtta aaaaaaaatc ttccatttcc atccatgcat 360
gggaaaaggg cttaggtata gtttaggatg gatgtgtgta taataataaa atgataagat 420
atgcatagtg ggggaataaa gcctcagagt ccttccagta tggggaatcc attgtatct 479
```

<210> 285

<211> 435

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 27, 83, 90, 93, 96, 184, 207, 227, 232, 293, 306, 307, 328, 331, 339, 343, 347, 349, 350, 370, 371, 382, 383, 414, 418, 434

<223> n = A,T,C or G

<400> 285

```
tttttttttt tttttttttt tcaatanaaa tgccataatt tattccattg tataaaaaag 60
tcaccccttat gtaacaaaat gtnttcttan aanaanaaat atattatttc aggtcataaa 120
taatcagcaa acatacaact gttggcaact aaaaaaaaac ccaacactgg tattttccat 180
cagngctgaa aacaaacctg cttaaanata tatttacagg gatagtnacg tinctaaaaa 240
caaaaattga ggtattttgg ttcttctagg agtagacaat gacattttgg gangggcaga 300
cccctnnccc aaaaaataaa ataagggnat nttcttcant atngaannnn gggggcgccc 360
cggggaaaaa naaaccttgg gnnngggggt tggcccaagc ccttgaaaaa aaantttntt 420
tccccaaaaa aacng 435
```

<210> 286

<211> 301

<212> DNA

<213> Homo sapiens

<400> 286

```
cctggttttct ggtggcctct atgaatccca tgtagggtgc agaccgtact ccatccctcc 60
ctgtgagcac caggtcaacg gctcccggcc ccatgcacg ggggaggag atacccccaa 120
gtgtagcaag atctgtgagc ctggctacag cccgacctac aaacaggaca agcactacgg 180
atacaattcc tacagcgtct ccaatagcga gaaggacatc atggccgaga tctacaaaaa 240
cgcccccggtg gagggagctt tctctgtgta ttcggaactc ctgctctaca agtcaggagt 300
g 301
```

<210> 287

<211> 432

<212> DNA

<213> Homo sapiens

<400> 287

```
tccagcttgt tgccagcatg agaaccgcca ttgatgacat tgaacgccgg gactggcagg 60
```

```

atgacttcag agttgccagc caagtcagcg atgtggcggt acagggggac ccccttctca 120
acggcaccag ctttgccagc ggcaaggagc acccccagaa tggcgttcgc accaaactta 180
gatttatttt ctgttccatc catctcgatc atcagtttgt caatcttctc ttgttctgtg 240
acgttcagtt tcttgctaac cagggcaggc gcaatagttt tattgatgtg ctcaacagcc 300
tttgagacac ccttccccat atagcgagtc ttatcattgt cccggagctc tagggcctca 360
tagataccag ttgaagcacc actgggcaca gcagctctga agagaccttt tgaggtgaag 420
agatcaacct ca 432

```

<210> 288

<211> 326

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 254

<223> n = A,T,C or G

<400> 288

```

tctggctcaa gtcaaagtcc tggctcctctt ctccgcctcc ttcttcatca tagtaataaa 60
cgttgtcccg ggtgtcatcc tctgggggca gtaagggtc tttgaccacc gctctcctcc 120
gaagaaacag caagagcagc agaatcagaa ttagcaaagc aagaattcct ccaagaatcc 180
ccagaatggc aggaatttgc aatcctgctt cgacaggctg tgccttctta cagacgcccg 240
cggccccctt acantcacac acgctgacct ctaagggtgt cacttggtct ttattctggt 300
tatccatgag cttgagattg attttg 326

```

<210> 289

<211> 451

<212> DNA

<213> Homo sapiens

<400> 289

```

gtcccggtgt ggctgtgccg ttggtcctgt gcggtcactt agccaagatg cctgaggaaa 60
cccagaccca agaccaaccg atggaggagg aggaggttga gacgttcgcc tttcaggcag 120
aaattgcccc gttgatgtca ttgatcatca atactttcta ctgaacaaa gagatctttc 180
tgagagagct catttcaaat tcatcagatg cattggacaa aatccggtat gaaagcttga 240
cagatcccag taaattagac tctgggaaag agctgcatat taaccttata ccgaacaaac 300
aagategaac tctcactatt gtggatactg gaattggaat gaccaaggct gacttgatca 360
ataaccttgg tactatcgcc aagtctggga ccaaagcgtt catggaagct ttgcaggctg 420
gtgcagatat ctctatgatt ggacctcggc c 451

```

<210> 290

<211> 494

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 421

<223> n = A,T,C or G

<400> 290

```

tttttttttt tcaaaacagt atatttttatt ttacaatagc aaccaactcc ccagtttgtt 60
tcaattgtga catctagatg gcttaagatt actttctggt ggtcacccat gctgaacaat 120

```

```
<210> 291
<211> 535
<212> DNA
<213> Homo sapiens
```

```
<210> 292
<211> 376
<212> DNA
<213> Homo sapiens
```

<400>	292						
tacnagcccg	tgctgatcga	gatcctggtg	gaggtgatgg	atccttcoctt	cgtgtgcttg	60	
aaaattggag	cctgccoctc	ggcccataag	cccttggttg	gaactgagaa	gtgtatatgg	120	
ggcccaagct	actggtgcc	gaacacagag	acagcagccc	agtgcaatgc	tgtcgagcat	180	
tgcaaacgcc	atgtgtggaa	ctaggaggag	gaatattcca	tcttggcaga	aaccacagca	240	
ttggtttttt	tctacttgtg	tgtctggggg	aatgaacgca	cagatctggt	tgactttggt	300	
ataaaaaatag	ggctccccc	cctcccccat	ttttgtgtcc	tttattgnag	cattgctgtc	360	
tgcaaggagg	ccccta					376	

<400> 293							
tcggtctgtt	cctggtctgg	cgggggatggg	tttgcttttg	aaatcctcta	ggaggctcct		60
cctgcgatgg	cctgcagttc	ggcagcagcc	cgcagttggt	tctcgcgtga	tgcatttctt		120
tctctccaggt	agagtttttt	ttgcttatgt	tgaattccat	tgccctctttt	ctcattccag		180
aagtgatgtt	ggaatcgttt	cttttgtttg	tctgatttat	ggttttttta	atcataaaca		240
aaagtttttt	attagcattc	tgaagaagg	aaagtaaaat	gtacaagttt	aataaaaagg		300

ggccttcccc tttagaatag

320

<210> 294

<211> 359

<212> DNA

<213> Homo sapiens

<400> 294

ctgtcataaa ctggtctgga gtttctgacg actccttggt caccaaatgc accatttcct 60
gagacttgct ggectctccg ttgagtcacac ttggctttct gtccctccaca gctccattgc 120
cactgttgat cactagcttt ttcttctgcc cacaccttct tcgactgttg actgcaatgc 180
aaactgcaag aatcaaagcc aaggccaaga gggatgccaa gatgatcagc cattctggaa 240
tttggggtgt ctttatagga ccagaggttg tgtttgctcc accttcttga ctcccatgtg 300
agtgtccatc tgattcagat ccatgagtgg tatgggaccc cccactgggg tggaatgtg 359

<210> 295

<211> 584

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 558

<223> n = A,T,C or G

<400> 295

cctgagttgg gctgactgcc agagacagac ccctctgggt ctcggtgaac cagccaggca 60
tttacctcag tggttggcac ctggaacctg tccagggcc tcacctgact gaggagccgc 120
cgggcagtga agtaattgtc caggtctatg ctcttggggt ggataccata gccatccaag 180
gtatttctca ggttgtggaa ctgggtctga gtataggcag aactgggccc caggatgac 240
tcccggagtg ggggaagctg tgaggtcagg taagtatcca cgtccaccgc taccccaatc 300
aaactcagca gaatggtgaa ctggagaagt ccttccgtta agtatttctt cagagaaaagc 360
attgctgaag gaccagaatg tttatgcttt ttggttttta aaatcttcca aaagacaaat 420
caaggccact gctctgccgc tccagccagc aggttaccct cctcagtgtc aaaccccgta 480
ccccaccctg gcagaacaca agggatgagc tccctgacgg ccccagagga aagcacaccc 540
tgtggagcca aggccaanga cacactccag accacattca cttt 584

<210> 296

<211> 287

<212> DNA

<213> Homo sapiens

<400> 296

ccttatcatt cattcttagc tcttaattgt tcattttgag ctgaaatgct gcattttta 60
tttaacaaaa acatgtctcc tatcctggtt ttgttagcct tctccacat cttttctaaa 120
caagatttta aagacatgta ggtgtttgtt catctgtaac tctaaaagat cttttttaaa 180
ttcagtccta agaaagagga gtgcttgctc cctaagagtg tttaatggca aggcagccct 240
gtctgaagga cacttctgc ctaagggaga gtggtatttg cagacta 287

<210> 297

<211> 457

<212> DNA

<213> Homo sapiens


```

<400> 297
ccaattgaaa caaacagttc tgagaccgtt ctccaccac tgattaagag tgggggtggca 60
ggtattaggg ataattattc tttagccttc tgagctttct gggcagactt ggtgaccttg 120
ccagctccag cagccttctt gtccactgct ttgatgacac ccaccgcaac tgtctgtctc 180
atatcacgaa cagcaaagcg acccaaaggt ggatagtctg agaagctctc aacacacatg 240
ggcttgccag gaaccatatc aacaatggca gcatcaccag acttcaagaa tttagggcca 300
tcttccagct ttttaccaga acggcgatca atcttttctc tcagctcagc aaacttgcac 360
gcaatgtgag ccgtgtggca atccaatata ggggcataga cggcgcttat ttggcctgga 420
tggttcagga taatcaactg agcagtgaag ccagacc 457

```

```

<210> 298
<211> 469
<212> DNA
<213> Homo sapiens

```

```

<400> 298
tctttgactt tccttgtcta cctcctctgg agatctcaaa ttctccaggt tccatgctcc 60
cagagatctc aatgattcct gattctcctc ttccaggagt ctgaatgtct cttgggtcac 120
ttccacagac tccagtgggt cttgaatttc cttttctaga ggattcattg ccccttgatt 180
tatttcttct ggagtccaca gtggtgcttg agtttctgga gatttcagtg tttccagggt 240
ctcttgctcc gcagacttca gtgattctag gatctctgtt tctaaagatt ttactgcctc 300
tatgctctct tctttgagtg actttaagaa ctcttgattc tcattttcaa gaggtctagc 360
tatctcctgg tcaagagact tcagtgggtc tagatccact tttctgagg gtcttaatgt 420
catctgatcc tgttccccta gagacctccg tcgctgttga gtctctttt 469

```

```

<210> 299
<211> 165
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 37, 82, 144
<223> n = A,T,C or G

```

```

<400> 299
tctgtggaga ggatgaggtt gagggaggtg gggatatnctg ctgctctgac cttaggtaga 60
gtctccaca gaagcatcaa antggactgg cacatatgga ctcccttcac aggccacaat 120
gatgtgtctc tcttcggggt tggncgggta tgcacagttg gggtta 165

```

```

<210> 300
<211> 506
<212> DNA
<213> Homo sapiens

```

```

<400> 300
tctgaggaaa gtttgggctt attagtattt gctccagcga acctccaagt tttctccatt 60
goggacaacg taactaccag ctcttgggtc cagtgggttcg cctccactca gaagttccca 120
gtagggttctg tcattattgt tggcacatag gccctgaata cagggtgatat agggcccca 180
tgagcgctcc tccattgtga aaccaaatat agtatcattc attttctggg ctttctccat 240
cacactgagg aagacagaac catttagcac agtgacattg gtgaaatatg tttcattgat 300
tctcacagag taattgacgg agatatatga ttgtgagtca ggaggtgtca cagttatagg 360
ctcatcagcg gagatgttga agttacctga agcagagacg caagaagagt ctttggtta 420
atccaagaag gtctttccca tcagggcagg taagacctgg gctgcagcgt ttggattgct 480

```

gaatgctcct tgagaaatct ccgtag

506

<210> 301

<211> 304

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 221, 223, 252, 275, 280

<223> n = A,T,C or G

<400> 301

```
tcctaaggca gagccccat cacctcaggc ttctcagttc ccttagccgt cttactcaac 60
tgcccccttc ctctccctca gaatttgtgt ttgctgcctc tatcttggtt ttgtgttttt 120
cttctggggg gggctctaga cagtgcctgg cacatagtag gcgctcaata aatacttggt 180
tggtgaatgt ctctctctc tttccactct gggaaacctc ngnttctgcc attctgggtg 240
accctgtatt tntttctggt gccattcca tttgnccagn taatacttcc tcttaaaaaat 300
ctcc 304
```

<210> 302

<211> 492

<212> DNA

<213> Homo sapiens

<400> 302

```
ttttcagtaa gcaacttttc catgctctta atgtattcct ttttagtagg aatccggaag 60
tattagattg aatggaaaag caattgccat ctctgtctag gggtcacaaa ttgaaatggc 120
tcctgtatca catacggagg tcttgtgtat ctgtggcaac agggagtgtc cttattcact 180
ctttattttg tgctgtttta gttgccaacc tcccctccca ataaaaattc acttacacct 240
cctgcctttg tagttctggt attcacttta ctatgtgata gaagtagcat gttgctgcca 300
gaatacaagc attgcttttg gcaaattaaa gtgcatgtca tttcttaata cactagaaag 360
gggaaataaa ttaaagtaca caagtccaag tctaaaactt tagtactttt ccatgcagat 420
ttgtgcacat gtgagagggt gtccagtttg tctagtgtat gttattttaga gagttggacc 480
actattgtgt gt 492
```

<210> 303

<211> 470

<212> DNA

<213> Homo sapiens

<400> 303

```
tctggggcag caggtactcc ctacggcact agtctacagg gggaaggacg ctctgtgctg 60
gcagcgggtg ctacatggc ctgtctgcac tgtaaccaca ggctgggatg tagccaggac 120
ttggtctcct tggaagacag gtctgatgtt tggccaatcc agtccttcag accctgcctg 180
aaacttgat ctacgtgaa cttaaagaat aaaatgcatt tctaccccgga tctcgcccc 240
aggactggca cgacaggccc acggcagatt agatcttttc ccagtactga tcggtgcgtg 300
gaattccagc caccacttct gattcgattc cacagtgtat ctgtcctctg agtattttta 360
agaagccatt gtcacccag tcaagtgttc aggagttggc aaccagccag tagggtgtgc 420
cattctccac tccccagccc aggatgcgga tggcatggac ctcggccgcg 470
```

<210> 304

<211> 79

<212> DNA

<213> Homo sapiens

<400> 304

tgtcccattg ttaactcagc ctcaaattctc aactgtcagg ccctacaaag aaaatggaga 60
gcctcttctg gtggatgcg 79

<210> 305

<211> 476

<212> DNA

<213> Homo sapiens

<400> 305

tcactgagcc accctacagc cagaagagat atgaggaaat tgttaaggaa gtcagcactt 60
acattaagaa aattggctac aaccccgaca cagtagcatt tgtgccaatt tctgggttga 120
atggtgacaa catgctggag ccaagtgcta acgtaagtgg ctttcaagac cattgttaaa 180
aagctctggg aatggcgatt tcatgcttac acaaattggc atgcttgtgt ttcagatgcc 240
ttggttcaag ggatggaaag tcaccogtaa ggatggcaat gccagtggaa ccacgctgct 300
tgaggctctg gactgcatcc taccaccaac tcgtccaact gacaagccct tgcgcctgcc 360
tctccaggat gtctacaaaa ttggtggttaa gttggctgta aacaaagttg aatttgagtt 420
gatagagtac tgtctgcctt cataggtatt tagtatgctg taaatatttt taggta 476

<210> 306

<211> 404

<212> DNA

<213> Homo sapiens

<400> 306

tctgtctcgg agctcagggc gcagccagca cacacaggag cccacaggac agccacgtct 60
tcacagaaac tacagaagtc aggaccagc cgaggacctc aggaacaagt gccccctgca 120
gacagagaga cgcagtagca acagcttctg aacaactaca taataatgcg gggagaatcc 180
tgaagaccac tgcattccac aagcactgac aaccacttca ggattttatt tcctccactc 240
taacccccag atccatttat gagaagtgcg tgaggatggc aggggcatgg aggggtgaagg 300
gacagcaagg atggtctgag ggccctggaaa caatagaaaa tcttcgtcct ttagcatatc 360
ctggactaga aaacaagagt tggagaagag gggggttgat acta 404

<210> 307

<211> 260

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 10, 255, 257

<223> n = A,T,C or G

<400> 307

tcctgcctan acatctgtga gggcctcaag ggctgctgcc tcgactttct ccctagctaa 60
gtccacccgt ccagggacac agccagggca ctgctctgtg ctgacttcca ctgcagccaa 120
gggtcaaaaat gaagcatctg cggaggccag gactccttgg catcgacac agtcagggga 180
aaagccaccc tgactctgca ggacagaggg tctagggta tttggcagga gaacactggg 240
gtgccaaagg aagcnancat 260

<210> 308

<211> 449

<212> DNA
<213> Homo sapiens

<400> 308
tctgtgctcc cgactcctcc atctcaggta ccaccgactg cactgggcgg ggccctctgg 60
ggggaaaggc tccacggggc agggatacat ctcgaggcca gtcacccctct ggaggcagcc 120
caatcaggtc aaagattttg cccaactggc cggttcaga gtttccacag aagagaggct 180
ttcgacgaaa catctctgca aagatacagc caacactcca catgtccaca ggtgttgcat 240
atgtggactg cagaagaact tcgggagctc ggtaccagag tgtaacaacc ttgatcggtt 300
cggctggcaa gcctgggtggg ggtgccttgt ccagatatgt ccttaggtcc tggctctacat 360
gctcaaacac cagggttacc ttgatctccc ggtcagttcg ggatgtggca cagacgtcca 420
tcagccggac aacattggga tgcataaaa 449

<210> 309
<211> 411
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 384
<223> n = A,T,C or G

<400> 309
ctgtggaaac ctgggggtgcc gggtaaattg agaactccag cttggatttc ttgccataat 60
caactgagag acgttccatg agcaggagg tgaaccaga accagttccc ccaccaaagc 120
tgttgaaaaac caagaagccc tgaagaccgg tgcaactggtc agccagcttg cgaattcggt 180
ccaacacaag gtcaatgatc tccttgccaa tgggttagtg ccctcgggca tagttattgg 240
cagcatcttc cttgcctgtg atgagctgct cagggtggaa gagctggcgg taggtgccag 300
tgccaacttc atcaatgact gtgggttcca agtctacaaa cacagcccgg ggcacgtgct 360
tgccagcgcc cgtctcactt gaanaagggt gtttgaagga agtcatctcc t 411

<210> 310
<211> 320
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 250
<223> n = A,T,C or G

<400> 310
tcctcgcca gcttgactcg attagtcctc ataaggtaag caaggcagat ggtggctgac 60
cgggaaatgc ctgcctggca gtggacaaac acccttcctc cagcattctt gatggagtct 120
atgaagtcaa tggcctcggt gaaccaggag ctgatgtctg ccttgtggtt gtcctccaca 180
gggatgctct tgtactggta gtgacctca aaatggttgg gacaattggc tgagacgttg 240
atcaaggcan ttatgcccac ggcattccagc atgtccttgc gggaagcgtg atacgcactg 300
cccagggtaca gaaagggcag 320

<210> 311
<211> 539
<212> DNA
<213> Homo sapiens

<400> 311
tctggcccat gaagctgaag ttgggagaga tgatgcttcg cctctgcttc acaaactcaa 60
aggcctcgtc cagcttgact cgattagtc tcataaggta agcaaggcag atgggtggctg 120
accgggaaat gcctgcctgg cagtggacaa acacccttcc tccagcattc ttgatggagt 180
ctatgaagtc aatggcctcg ttgaaccagg agctgatgtc tgccttggtg ttgtcctcca 240
cagggatgct cttgtactgg tagtgaccct caaaatgggt gggacaattg gctgagacgt 300
tgatcaaggc agttatgccc aaggcatcca gcatgtcctt gcggaagcg tgatacgcac 360
tgcccaggta cagaaagggc aggatttcca ccgggccacc ctgaaatcca gaaatatcca 420
acattcatca agcttgctca aagccaaggc cagtgcccat acccacaaaa actttctgct 480
ggaaaagtca atttcagata ccgagtgaac tcagttctgt tgctggagga taaataaat 539

<210> 312
<211> 475
<212> DNA
<213> Homo sapiens

<400> 312
tcaaggatct tcttaaagcc accatgtgag aggattcgga cgagagtctg agctgtatgg 60
cagaccatgt cctgctgttc tagggtcatt actgtgtgta ctctaaagtt gccactctca 120
caggggtcag tgataccac tgaacctggc aggaacagtc ctgcagccag aatctgcaag 180
cagcgctgt atgcaacgtt tagggccaaa ggctgtctgg tggggttgtt catcacagca 240
taatggccta gtaggtcaag gatccagggt gtgaggggtc caaagccagg aaaacgaatc 300
ctcaagtcct tcagtagtct gatgagaact ttaactgtgg actgagaagc attttcctcg 360
aaccagcggg catgtcggat ggctgctaag gcactctgca atactttgat atccaaatgg 420
agttctggat ccagttttcg aagattgggt ggcactgttg taatgagaat ctcca 475

<210> 313
<211> 456
<212> DNA
<213> Homo sapiens

<400> 313
tccacttaaa ggggtgcctct gccaaactggt ggaatcatcg ccacttccag caccacgcca 60
agcctaacat cttccacaag gatcccgatg tgaacatgct gcacgtgttt gttctgggag 120
aatggcagcc catcgagtag ggcaagaaga agctgaaata cctgccctac aatcaccagc 180
aogaatactt cttcctgatt gggccgcccgc tgctcatccc catgtatttc cagtaccaga 240
tcatcatgac catgatcgtc cataagaact ggggtggacct ggccctgggccc gtcagctact 300
acatccgggt cttcatcacc tacatccctt tctacggcat cctgggagcc ctccctttcc 360
tcaacttcat caggttcctg gagagccact ggtttgtgtg ggtcacacag atgaatcaca 420
tgcctcatgga gattgaccag gaggacctcg gcccgcc 456

<210> 314
<211> 477
<212> DNA
<213> Homo sapiens

<400> 314
tgctggggct tctggaagcc tggatctgga atcattcacc agattattct ggaaaactat 60
gcgtaccctg gtgttcttct gattggcact gactcccaca cccccaatgg tggcgccctt 120
gggggcatct gcattggagt tgggggtgcc gatgctgtgg atgtcatggc tgggatcccc 180
tgggagctga agtccccaa ggtgattggc gtgaagctga cgggctctct ctccggttgg 240
tcctcaccga aagatgtgat cctgaagggt gcaggcatcc tcacggtgaa aggtggcaca 300
ggtgcaatcg tggaatacca cgggctgggt gtagactcca tctcctgcac tggcatggcg 360

```

acaatctgca acatgggtgc agaaattggg gccaccactt ccgtgttccc ttacaaccac 420
aggatgaaga agtatctgag caagaccggc cggaagaca ttgccaatct agctgat 477

```

```

<210> 315
<211> 241
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 35
<223> n = A,T,C or G

```

```

<400> 315
caggtactgg atgtcaggtc tgcgaaactt cttanatttt gacctcagtc cataaaccac 60
actatcacct cggccatcat atgtgtctac tgtggggaca actggagtga aaacttcggt 120
tgctgcaggt ccgtgggaaa atcagtgacc agttcatcag attcatcaga atggtgagac 180
tcatcagact ggtgagaatc atcagtgtca tctacatcat cagagtcgtt cgagtcaatg 240
g 241

```

```

<210> 316
<211> 241
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 1, 4, 32, 39, 68, 77, 82, 94, 166, 172, 195, 196
<223> n = A,T,C or G

```

```

<400> 316
nttntgtgat agtgtggttt atggactgag gncaaaatnt aagaagtttc gcagacctga 60
catccaancc tgcccgngcg gncgctcgaa aggnCGaatt ctgcagatat ccatcacact 120
ggcgcccgct cgagcatgca tctagagggc ccaattcgcc ctatantgag tnatattaca 180
attcactggc cgtcnnttta caacgtcgtg actgggaaaa ccctggcggtt acccaactta 240
a 241

```

```

<210> 317
<211> 241
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 15, 25, 135, 154, 193
<223> n = A,T,C or G

```

```

<400> 317
aggtaccctg ctcancagcc tgggngcctg ggttgtctcc ttgtccatcc actggtccat 60
tctgctctgc atttttttgt tcctcttttg gaggttccac tttgggtttg ggctttgaaa 120
ttatagggct acaantacct cggcgaaaac cacnctaagg gcgaattctg cagatatcca 180
tcacactggc ggncgctcga gcatgcatct agagggccca attcgcccta tagtgagtcg 240
t 241

```

<210> 318
 <211> 241
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 3, 5, 10, 11, 24, 28, 31, 34, 40, 42, 47, 53, 74, 80, 96,
 101, 127, 129, 136, 138, 205, 241
 <223> n = A,T,C or G

<400> 318
 cgngnacaan ntacattgat gganggtntg nggntctgan tntttantta cantggagca 60
 ttaatatattt cttnaacgtn cctcaccttc ctgaantaaa nactctgggt tgtagcgctc 120
 tgtgctnana accacntnaa ctttaccatcc ctcttttgga ttaatccact gcgcggccac 180
 ctctgccgcg accacgctaa gggcnaattc tgcagatatc catcacactg ggggcgcgctc 240
 n 241

<210> 319
 <211> 241
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 24, 36, 39
 <223> n = A,T,C or G

<400> 319
 caggtactga tccgtgcgtg gaantccagc caccantntt gattcgattc cacagtgate 60
 ctgtcctctg agtatattta agaagccatt gtcacccag tcagtgttcc aggagttggc 120
 aaccagccag tagggtgtgc cattctccac tcccagccc aggatgcgga tggcatggcc 180
 accatcatc tctccggtga cgtgttggtta cctcgccgcg gaccacgcta agggcgaatt 240
 c 241

<210> 320
 <211> 241
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 27, 215, 216, 217, 220, 222, 235
 <223> n = A,T,C or G

<400> 320
 ggcaggtacc aacagagctt agtaatntct aaaaagaaaa aatgatcttt ttccgacttc 60
 taacaagtgt actatactag cataaatcat tctagtaaaa cagctaaggt atagacattc 120
 taataatttg ggaaaaccta tgattacaag tgaaaactca gaaatgcaaa gatgttggtt 180
 ttttgtttct cagtctgctt tagcttttaa ctctnnnaan cncatgcaca cttgnaactc 240
 t 241

<210> 321
 <211> 241

<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 2, 25, 26, 228
<223> n = A,T,C or G

<400> 321
angtaccaac agagcttagt aattnntaaa aagaaaaaat gatctttttc cgacttctaa 60
acaagtgact atactagcat aaatcattct agtaaaacag ctaagggtata gacattctaa 120
taatttgagg aaacctatga ttacaagtga aaactcagaa atgcaaagat gttgggtttt 180
tgtttctcag tctgcttttag cttttaactc tggaagcgca tgcacacntg aactctgctc 240
a 241

<210> 322
<211> 241
<212> DNA
<213> Homo sapiens

<400> 322
ggtaccaaca gagcttagta atttctaaaa agaaaaaatg atctttttcc gacttctaaa 60
caagtgacta tactagcata aatcattctt ctagtaaaac agctaaggta tagacattct 120
aataatttgg gaaaacctat gattacaagt aaaaactcag aaatgcaaag atgttggttt 180
tttgtttctc agtctgcttt agcttttaac tctggaagcg catgcacact gaactctgct 240
c 241

<210> 323
<211> 241
<212> DNA
<213> Homo sapiens

<400> 323
cgagggtactg tcgtatcctc agccttggtc tatttcttta ttttagcttt acagagatta 60
ggtctcaagt tatgagaatc tccatggctt tcaggggcta aacttttctg ccattctttt 120
gctcttaccg ggctcagaag gacatgtcag gtgggatacg tgtttctctt tcagagctga 180
agaaagggtc tgagctgcgg aatcagtaga gaaagccttg gtctcagtga ctcttggct 240
t 241

<210> 324
<211> 241
<212> DNA
<213> Homo sapiens

<400> 324
agggtactgtc gtatcctcag ccttggttcta tttctttatt ttagctttac agagattagg 60
tctcaagtta tgagaatctc catggctttc aggggctaaa cttttctgcc attcttttgc 120
tcttaccggg ctcaagaagg catgtcaggt gggatacgtg tttctctttc agagctgaag 180
aaaggggtctg agctgcggaa tcagtagaga aagccttggg ctcaagtact ccttggcttt 240
c 241

<210> 325
<211> 241
<212> DNA

<213> Homo sapiens

<400> 325

```
ggcaggtaca tttgttttgc ccagccatca ctcttttttg tgaggagcct aaatacattc 60
ttcctggggg ccagagtccc cattcaaggc agtcaagtta agacactaac ttggcccttt 120
cctgatggaa atatttcctc catagcagaa gttgtgttct gacaagactg agagagttac 180
atgttgggaa aaaaaaagaa gcattaactt agtagaactg aaccaggagc attaagttct 240
g                                                                 241
```

<210> 326

<211> 241

<212> DNA

<213> Homo sapiens

<400> 326

```
gcaggtacat ttgttttggc cagccatcac tcttttttgt gaggagccta aatacattct 60
tcctgggggt ccagagtccc attcaaggca gtcaagttaa gacactaact tggccctttc 120
ctgatggaaa tatttcctcc atagcagaag ttgtgttctg acaagactga gagagttaca 180
tgttgggaaa aaaaagaagc attaacttag tagaactgat ccaggagcat taagttctga 240
a                                                                 241
```

<210> 327

<211> 241

<212> DNA

<213> Homo sapiens

<400> 327

```
ggtaccagac caagtgaatg cgacagggaa ttatttcctg tgttgataat tcatgaagta 60
gaacagtata atcaaaatca attgtatcat cattagtttt ccactgcctc acactagtga 120
gctgtgccaa gtagtagtgt gacacctgtg ttgtcatttc ccacatcacg taagagcttc 180
caaggaaagc caaatcccag atgagtctca gagagggatc aatatgtcca tgattatcag 240
g                                                                 241
```

<210> 328

<211> 241

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 6, 19, 66, 232, 240

<223> n = A,T,C or G

<400> 328

```
ggtacnagac caaatgaang ccacagggaa ttatttcctg tgttgataat tcatgaagta 60
gaacantata atcaaaatca attgtatcat cattagtttt ccactgcctc acactagtga 120
gctgtgccaa gtagtagtgt gacacctgtg ttgtcatttc ccacatcacg taagagcttc 180
caaggaaagc caaatcccag atgagtctca gagagggatc aatatgtcca tnatcatcan 240
g                                                                 241
```

<210> 329

<211> 241

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 33, 61, 220, 228, 229, 240, 241

<223> n = A,T,C or G

<400> 329

```
ttcaggtcga gttggctgca gatttgtggt gcntttctgag ccgtctgtcc tgcgcacaaa 60
ngcttcaaag tattattaaa aacatatgga tcccatgaa gccctactac accaaagttt 120
accaggagat ttggatagga atggggctga tgggcttcac cgtttataaa atccgggctg 180
ctgataagaa gtaaggcttt gaaagcttca gcgcctgctn ctggtcanna ctaaccatan 240
n 241
```

<210> 330

<211> 241

<212> DNA

<213> Homo sapiens

<400> 330

```
ttttgtgcag atttgtggtg cgttctgagc cgtctgtcct gcgccaagat gcttcaaagt 60
attattaaaa acatatggat ccccatgaag ccctactaca ccaaagttaa ccaggagatt 120
tggataggaa tggggctgat gggcttcacg gtttataaaa tccgggctgc tgataaaaga 180
agtaaggctt tgaaagcttc agcgcctgct cctggctcac actaaccaga tttacttgga 240
g 241
```

<210> 331

<211> 241

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 1, 9, 41, 60, 61, 119, 124, 132, 139, 141, 153, 168

<223> n = A,T,C or G

<400> 331

```
nttttaggna ctttgggctc cagacttcac tggctctagg nattgaaacc atcacctggn 60
ntgcattcct catgactgag gttaacttaa aacaaaaaat gtaggaaagc tttcctatnc 120
ttcnggtaag anacaaatnt nctttaaaaa aangtggaag gcatgacnta cgtgagaact 180
gcacaaactg gccactgaca aaaatgaccc ccatttgtgt gacttcattg agacacatta 240
c 241
```

<210> 332

<211> 241

<212> DNA

<213> Homo sapiens

<400> 332

```
tgtgaggaga gggaacatgc tgagaaactg atgaagctgc agaaccaacg aggtggccga 60
atcttccttc aggatatcaa gaaaccagac tgtgatgact gggagagcgg gctgaatgca 120
atggagtgtg cattacattt ggaaaaaaat gtgaatcagt cactactgga actgcacaaa 180
ctggccactg acaaaaatga ccccatcttg tgtgacttca ttgagacaca ttacctgaat 240
g 241
```

<210> 333
 <211> 241
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 44, 52, 60, 98, 104, 108, 124, 126, 190, 198, 206, 214
 <223> n = A,T,C or G

<400> 333
 caggtacaag cttttttttt tttttttttt tttttttttt ttgnaaatac tntttattgn 60
 aaatattcta tcctaaattc catatagcca attaatnttt acanaatntt ttgttaattt 120
 ttgngngtat aaattttaca aaaataaagg gtatgtttgt tgcacacaac ttacaaataa 180
 taataaactn tttattgnaa atatntttta ttgnaaatat tctttatcct aaattccata 240
 t 241

<210> 334
 <211> 241
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 10, 16, 22, 24, 49, 158, 159, 237
 <223> n = A,T,C or G

<400> 334
 tacctgctgn aggggntgaa gncntctctg ctgccccagg catctgcanc ccctgctgct 60
 ggttctgccc ctgctgcagc agaggagaag aaagatgaga agaaggagga gtctgaagag 120
 tcagatgatg acatgggatt tggccttttt gattaaannc ctgctccctt gcaaataaag 180
 cctttttaca caaaaaaaaa aaaaaaaaaa aaaaaaaaaa aagcttgtag ctgcccnggc 240
 g 241

<210> 335
 <211> 241
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 39
 <223> n = A,T,C or G

<400> 335
 ctatgtgctg ggatgactat ggagacccaa atgtctcana atgtatgtcc cagaaacctg 60
 tggctgcttc aaccattgac agttttgctg ctgctggctt ctgcagacag tcaagctgca 120
 gtccccccaa aggctgtgct gaaacttgag ccccggtgga tcaacgtgct ccaggaggac 180
 tctgtgactc tgacatgcca gggggctcgc agccctgaga gcgactccat tcagtgggtc 240
 c 241

<210> 336
 <211> 241
 <212> DNA

<213> Homo sapiens

<400> 336

```
taccaaccta tgcagccaag caacctcagc agttcccatc aaggccaact ccaccacaac 60
cgaaagtatc atctcagga aacttaattc ctgcccgtcc tgctcctgca cctcctttat 120
atagttccct cacttgattt ttttaacctt ctttttgcaa atgtcttcag ggaactgagc 180
taataactttt ttttttcttg atgttttctt gaaaagcctt tctgttgcaa ctatgaatga 240
a 241
```

<210> 337

<211> 241

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 47, 56, 69, 228

<223> n = A,T,C or G

<400> 337

```
ggtactgtat gtagctgcac tacaacagat tcttaccgtc tccacanagg tcatanattg 60
taaagtgttna atactgactt tttttttatt cccttgactc aagacagcta acttcatttt 120
cagaactgtt ttaaaccctt gtgtgctggg ttataaaaata atgtgtgttaa tccttggttg 180
tttcctgata ccagactgtt tcccgtgggt ggtagaata tattttgntt tgatgcttat 240
a 241
```

<210> 338

<211> 241

<212> DNA

<213> Homo sapiens

<400> 338

```
aggtagcagg gtgcgctgag ccgagtttac acggaaaagga taaagcccat ttagttttctt 60
ctcaaatgga gttttccact ttccctttgaa gtagacagca ttcaccagga tcatcctggg 120
atccccatct acagaacctt caggtaacaa gtttgggatt ttgcctttgg tttgagtctt 180
gaccaggaa ttaatctttt ttctagcttc ttctgcacat tctaggaagt ctactgcctg 240
g 241
```

<210> 339

<211> 241

<212> DNA

<213> Homo sapiens

<400> 339

```
taccgacggc tcttgagggg agagagtga gggacacggg aagaatcaaa gtcgagcatg 60
aaagtgtctg caactccaaa gatcaaggcc ataaccagg agaccatcaa cggaagatta 120
gttctttgtc aagtgaatga aatccaaaag cacgcatgag accaatgaaa gtttccgcct 180
gttgtaaaat ctattttccc ccaaggaaaag tccttgacac gacaccagtg agtgagttct 240
a 241
```

<210> 340

<211> 241

<212> DNA

<213> Homo sapiens

<400> 340

gtagccctca cacacacatg cccgtaacag gatttatcac aagacacgcc tgcattgtaga 60
ccagacacag ggcgtatgga aagcacgtcc tcaagactgt agtattccag atgagctgca 120
gatgcttacc taccacggcc gtctccacca gaaaaccatc gccaaactct gcgattcagct 180
tgtgacttac aaaccttggt taaaagctgc ttacatggac ttctgtcctt taaaagcttc 240
c 241

<210> 341

<211> 241

<212> DNA

<213> Homo sapiens

<400> 341

gtaccgccta ctttcgtctc atgtctccga acttcttgct gatggccggt ccaacggtgc 60
tgaaagctgc agttgccttt tgccctgctg gactcagggt ttcatgtggt ttcttgtagg 120
cagtggtagt ctgcatgtca tgccagcttt tgctgaaggt ctgttttaac tcattcatca 180
ggttcatgcc gagttttggt ttatctcaac tagatgcctt tctttcgtg acaaaaacttg 240
t 241

<210> 342

<211> 241

<212> DNA

<213> Homo sapiens

<400> 342

gtacattggt gctataaata taaatgctac ttatgaagca tgaaattaag cttctttttt 60
cttcaagttt tttctcttgt ctagcaatct gttaggcttc tgaaccaaga ccaaagttt 120
acgttctct gctgcatacc aacgttactc caaacaataa aaatctatca tttctgctct 180
gtgctgagga atggaaaatg aaacccccac cccctgaccc ctaggactat acagtggaaa 240
c 241

<210> 343

<211> 241

<212> DNA

<213> Homo sapiens

<400> 343

gtacattggt tagcagtaat ttttttgaag caactgcact gacattcatt tgagttttct 60
ctcattatca gattctgttc caaacaagta ttctgtagat ccaaaggtat taccagtgtg 120
ctacagactt cttattatag aacagcattc tattctacat caaaaatagt ttgtgtaagt 180
tagttttggt taccatctaa aatattttta aatgttcttt acataaaaaat ttatgttgtg 240
t 241

<210> 344

<211> 241

<212> DNA

<213> Homo sapiens

<400> 344

ggtacaaaat tgttggaatt tagctaatag aaaaacatag taaatattta caaaaacgtt 60
gataacatta ctcaagtcac acacatataa caatgtagac aggtcttaac aaagtttaca 120
aattgaaatt atggagattt cccaaaatga atctaatagc tcattgctga gcatgggtat 180
caatataaca tttaagatct tggatcaaat gttgtcccg agtcttctgc aatccagtcc 240

t 241

<210> 345
<211> 241
<212> DNA
<213> Homo sapiens

<400> 345
ggtagcgaagc tgagcgcacg gggggttgccc cagcgtggag cctggacctc aaacttcacg 60
gaaaatgctc tctctctttg acaggcttcc agctgtctcc taatttccctg gatgaactct 120
ccccggcgat ttaactgacg ctgaaaagtg gtgagaggac tgaggaagac aaccagggtca 180
gcgttagatc ggccctctgag ggtggtgccc ttgcctgagg agccaccctt taccaccttg 240
g 241

<210> 346
<211> 241
<212> DNA
<213> Homo sapiens

<400> 346
caggtaccac tgagcctgag atgggggatga gggcagagag aggggagccc cctcttccac 60
tcagttgttc ctactcagac tgttgccactc taaacctagg gaggttgaag aatgagaccc 120
ttaggtttta acacgaatcc tgacaccacc atctataggg tcccaacttg gttattgtag 180
gcaaccttcc ctctctcctt ggtgaagaac atcccaagcc agaaagaagt taactacagt 240
g 241

<210> 347
<211> 241
<212> DNA
<213> Homo sapiens

<400> 347
aggtacatct aaaggcatga agcactcaat tgggcaatta acattagtgt ttgttctctg 60
atggtatctc tgagaatact ggttgttagga ctggccagta gtgccttcgg gactgggttc 120
acccccaggt ctgcggcagt tgtcacagcg ccagccccgc tggcctccaa agcatgtgca 180
ggagcaaatg gcaccgagat attccttctg ccactgttct cctacgtggg atgtcttccc 240
a 241

<210> 348
<211> 241
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 2, 18, 29, 35, 56, 57, 64, 76, 77, 85, 102, 103, 104, 189, 232
<223> n = A,T,C or G

<400> 348
angtacttgg caagattnga tgctcttgng ctcantgaca tcattcataa cttgtngtg 60
tgancagagg aggagnncat catcntgtcc tcattcgtca gnnncctctc ctctctgaat 120
ctcaaacaag ttgataatgg agaaaaattt gaattctcag gattgaggct ggactgggtc 180
cgccctacang catacactag cgtggcctaag gccctctgc accctgcatg anaaccctga 240

c 241

<210> 349
 <211> 241
 <212> DNA
 <213> Homo sapiens

<400> 349
 gcaggtacca tttgtctgac ctctgtaaaa aatgtgatcc tacagaagtg gagctggata 60
 atcagatagt tactgctacc cagagcaata tctgtgatga agacagtgct acagagacct 120
 gctacactta tgacagaaac aagtgtctaca cagctgtggt cccactcgta tatgggtggtg 180
 agaccaaaat ggtggaaaca gccttaaccc cagatgcctg ctatcctgac taatttaagt 240
 c 241

<210> 350
 <211> 241
 <212> DNA
 <213> Homo sapiens

<400> 350
 aggtactgtg gatattttaa atatcacagt aacaagatca tgcttgttcc tacagtattg 60
 cgggccagac acttaagtga aagcagaagt gtttgggtga ctttctact taaaattttg 120
 gtcatatcat ttcaaaacat ttgcatcttg gttggctgca tatgctttcc tattgatccc 180
 aaaccaaadc ttagaatcac ttcattttaa atactgagcg gtattgaata cttcgaagca 240
 g 241

<210> 351
 <211> 241
 <212> DNA
 <213> Homo sapiens

<400> 351
 tacagaaatc atttgagacc gttttgagac agaagtagag gctctgtcaa gtcaatactg 60
 cattgcagct tgggtccactg aagaagccac gcctgagata caaaagatgc actacacttg 120
 acccgcttta tgttgcgttc ctctccctt ctctctcatc aactttatta gggttaaaaca 180
 ccacatacag gctttctcca aatgactccc tatgtctggg gtttggttag aattttatgc 240
 c 241

<210> 352
 <211> 241
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 10, 28, 29, 49, 54, 59, 72, 127, 148, 150, 160, 166, 182
 <223> n = A,T,C or G

<400> 352
 gtaccctgtn gagctgcacc aagattannt ggggccatca tgactgcanc cacnacgang 60
 acgcaggcgt gnagtgcac gtctgacctg gaaaccttt cacttctctg ctcccagggt 120
 gtcctcnggc tcatatgtgg gaaggcanan gatctctgan gagttncctg gggacaactg 180
 ancagcctct ggagaggggc cattaataaa gctcaacatc attggcaaaa aaaaaaaaaa 240
 a 241

<210> 353
 <211> 241
 <212> DNA
 <213> Homo sapiens

<400> 353
 aggtaccagt gcattaattht gggcaaggaa agtgtcataa tttgatactg tatctgtttt 60
 ccttcaaagt atagagcttht tggggaagga aagtattgaa ctgggggttg gtctggccta 120
 ctgggctgac attaaactaca attatgggaa atgcaaaaagt tgtttggata tggtagtggtg 180
 tggttctctt ttggaattht tttcaggtga ttttaataata atttaaaaact actataaaaa 240
 c 241

<210> 354
 <211> 241
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 1
 <223> n = A,T,C or G

<400> 354
 ngcaggtccg ggcaggtacc aagattcatt ctcacaaaa actagaaaca gaagggcaaa 60
 ttccagtttc cttctgggat tgaatacttht caagtaaggt cttcgacaaa caatcagggg 120
 gccaattht ccactgtaga ggtccttaac ttgatccaca gttgaataat aagcccatgg 180
 aatacaagca gaatcctctg ttccagctcc agatcttht gggatthtcc atacgtaagt 240
 g 241

<210> 355
 <211> 241
 <212> DNA
 <213> Homo sapiens

<400> 355
 ggtaccacc ctaaatttga actcttatca agaggctgat gaatctgacc atcaaatagg 60
 ataggatgga cttttttttg agttcattgt ataaacaaat tttctgattt ggactthaatt 120
 cccaaaggat taggtctact cctgctcatt cactctttca aagctctgtc cactctaact 180
 tttctccagt gtcatagata gggaattgct cactgcgtgc ctagtcttht ttcacttacc 240
 t 241

<210> 356
 <211> 241
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 27
 <223> n = A,T,C or G

<400> 356
 aggtactgta attgagcatc cggaatntgg agaagtaatt tagctacagg gtgaccaacg 60


```

caagaacata tgccagttcc tcgtagagat tggactggct aaggacgac agctgaaggt 120
tcatgggttt taagtgcttg tggctcactg aagcttaagt gaggatttcc ttgcaatgag 180
tagaatttcc cttctctccc ttgtcacagg tttaaaaacc tcacagcttg tataatgtaa 240
c                                                                241

```

```

<210> 357
<211> 241
<212> DNA
<213> Homo sapiens

```

```

<400> 357
ttttgtacca ccgatatgat caaggaaaat tctgcccatt tttatggctg aagttctaaa 60
aacctaattc aaagttcttc catgatccta cactgcctcc aagatgggcc aggctggcat 120
aaggcctgag cggcgggtgag atccgcggct gccagcagct tgctgctctt cagctgggat 180
gaagccctc ggccaccga gtctccagga cctgcccggg cgcgctcga aagggcgaat 240
t                                                                241

```

```

<210> 358
<211> 241
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 25, 57
<223> n = A,T,C or G

```

```

<400> 358
aggtacgggg agtgggggtg aagcntgttc tctacatagg caacacagcc gcctaantca 60
caaagtcagt ggtcggccgc ttcgaccaac atgtggtgag cattccacgg gcgcatgaag 120
tctgggtgct gtgctcgagt ctctgaatat tttgatagga agcgacaaga aaattcaaac 180
tgctctttgc tgactactgg aaagtgaaaa gatgctcaag tttaccattc aaagaaacca 240
t                                                                241

```

```

<210> 359
<211> 241
<212> DNA
<213> Homo sapiens

```

```

<400> 359
gaggtacaca aaaggaatac cttctgagag ccagggagtg aggaaagggg aaggagactt 60
gacgtcaagg gtgcttttga ggaacatgac gggccagcca gcctgcccc aactttgaggc 120
cctgctgggc tcttgtgact ataaatatac tgtctatttc taatgcaatc cgtctttcct 180
gaaagatctt gttatctttt actattgaga catgctttca tttttgtggt cctgtttcca 240
a                                                                241

```

```

<210> 360
<211> 241
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 1

```

<223> n = A,T,C or G

<400> 360

```
ngtactctat actaattctg cctttttata cttaattcta aatttctccc ctctaattta 60
caacaaatth tgtgattttt ataagaatct atgcctcccc aattctcaga ttcttctctt 120
ttctccttta tttctttgct taaattcagt ataagctttc ttgggtatth aggccttcag 180
cacattctta ttcctaaaca ccagcagttc ttcagagacc taaaatccag tataggaata 240
a 241
```

<210> 361

<211> 241

<212> DNA

<213> Homo sapiens

<400> 361

```
aggctactct cgtgccccga cactgaacat tatccagcca gatctgcccc gtgccagctc 60
ccactttgta cttttcttac tatectgtct agaatcatgt cttatgattt taacagatat 120
agaaccactc ctagaaaatg ttctttcact ttctcgtttc ctttttaatc tatcatcctg 180
actactgaac ttaaaatctt tttcttcctt tttttgtttc tcttttcttt tatcctgttc 240
a 241
```

<210> 362

<211> 241

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 17, 23

<223> n = A,T,C or G

<400> 362

```
aggctacttt atacctngct tangtcagtg acagatttac caatgacaac acaattttta 60
aattccaaca catatattac tttgtcctat gaagggcaaa aagtcaatat attttaaatt 120
ttaaaaacag aatggatata atgacctttt tacacatcag tgatatttaa aagacttaaa 180
gagacaatac tatggttgag aacttggtt cctattccag ccctaattaa agaaaaaata 240
g 241
```

<210> 363

<211> 241

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 4

<223> n = A,T,C or G

<400> 363

```
ttangtacta aaaacaaaat cctaattctg ttttaaagag ctgggagatg ttaatcatat 60
gtcagttttt tccacgttat aatttcctaa atgcaaaact ttcaatcagg gcagttcaaa 120
ttcattacat cacagtaaat aacagtagcc aactttgatt ttatgcttat aggaaaaaaa 180
atcctgtaga tataaaaaaca gcaaattttg acaataaaaa ctcaaaccat tcatccctaa 240
a 241
```

<210> 364
 <211> 241
 <212> DNA
 <213> Homo sapiens

<400> 364
 ggtacaagca gttagtcctg aaggcccctg ataagaatgt catctttctcc ccaactgagca 60
 tctccaccgc cttggccttc ctgtctctgg gggcccataa taccaccctg acagagattc 120
 tcaaaggcct caagttcaac ctcacggaga cttctgaggc agaaattcac cagagcttcc 180
 agcacctcct gcgcaccctc aatcagtcca gcgatgagct gcagctgagt atgggaaatg 240
 c 241

<210> 365
 <211> 241
 <212> DNA
 <213> Homo sapiens

<400> 365
 cgaggtactg agattacagg catgagccac cacgcccggc caaaaacatt taaaaaatga 60
 ctgtccctgc tcaaatactg cagtaggaaa tgtaatttga catatatcac ttccagaaaa 120
 aaactttaaa tctttctata aaatgaattt gatacatcat cagcatgaag tgaagttaaa 180
 atctcttaca aagtaaattc aggtatatca acaatgagat ccaaaagtat cggttcaaga 240
 t 241

<210> 366
 <211> 241
 <212> DNA
 <213> Homo sapiens

<400> 366
 ggcaggtaca catcaaacac ttcattgcct aaatgcaggg acatgcttcc atctgaccac 60
 ttgactatcc gagcattgct ttctttaatt tcatttcctt cttcatctcg gcgtatcctc 120
 catcttatag tattttctac ctttaatttt aacctggttc taccttcttc atccagcatt 180
 tcttcatctt caaattcacc ttcataatac tgggctctac acttgagaaa gttgggcagt 240
 t 241

<210> 367
 <211> 241
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 25
 <223> n = A,T,C or G

<400> 367
 gcaggtacaa ataattcctg ttgtnacatt tagtggacgc gattatctgt atacctcaaa 60
 ttttaattta agaaagtatc acttaaagag catctcattt tctatagatt gaggcttaat 120
 tactgaaaag tgactcaacc aaaaagcaca taacctttta aaggagctac acctaccgca 180
 gaaagtcaga tgccctgtaa ataactttgg tctttcaaaa tagtggcaat gcttaagata 240
 c 241

<210> 368
 <211> 241
 <212> DNA
 <213> Homo sapiens

<400> 368
 tttgtacatt gttaatatgtg accctcggag gaaatggatt tctcttctat taaaaactct 60
 atggtatata agcattacat aataatgcta cttaaccacc ttttgtctca agaattatca 120
 ccaaagtttt ctggaaataa gtccacataa gaattaaata tttaaaagggt gaaatgttcc 180
 ttattttaac tttagcaaga tcttttcttt ttcattaaga aacactttaa taattttaaa 240
 g 241

<210> 369
 <211> 241
 <212> DNA
 <213> Homo sapiens

<400> 369
 gcaggtaactt tattcttatt tcttataccta tattctgtgt tacagaaaaa ctactaccat 60
 aaacaaaaca ccaaccagcc acagcagttg tgtcaagcat gacaattggt ctagtcttca 120
 cattttatta gtaagtctat caagtaagag atgaagggtc tagaaaacta gacacaaagc 180
 aaccagggtc caaatcacca aggtagatct gtgcttagct aaagggaac acccgaagat 240
 t 241

<210> 370
 <211> 241
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 1
 <223> n = A,T,C or G

<400> 370
 ngttcacagt gcccctcggg cctcgccatg aggtctcttc tgctcgtccc ggtcctgggtg 60
 gtggttctgt cgatcgtctt ggaaggccca gcccagccc aggggacccc agacgtctcc 120
 agtgcccttg ataagctgaa ggagtttggg aacacactgg aggacaaggc tcgggaactc 180
 atcagccgca tcaaacagag tgaactttct gccaaagatgc gggagtgggt ttcagaagac 240
 a 241

<210> 371
 <211> 241
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 227
 <223> n = A,T,C or G

<400> 371
 ggcaggatcat cttgagcctt gcacatgata ctcagattcc tcacccttgc ttaggagtaa 60
 aacaatatac tttacagggt gataataatc tccatagtta tttgaagtgg cttgaaaaag 120

gcaagattga cttttatgac attggataaa atctacaaat cagccctcga gttattcaat 180
 gataactgac aaactaaatt atttccctag aaaggaagat gaaaggnagt ggagtgtggt 240
 t 241

<210> 372
 <211> 241
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 26, 27, 59
 <223> n = A,T,C or G

<400> 372
 aggtacagca aagcgacct tggtnnata gatcagacgg aaattctctc ccgtcttgnc 60
 aatgctgatg acatccatga atccagcagg gtaggttata tcagttcgga ccttgccatc 120
 gattttaatg aaccgctgca tgcaaatctt ctttacttca tctcctgtca gggcatactt 180
 aagtctgttc ctcaggaaaa tgatgagggg gagacactct ctcaacttgt ggggaccggt 240
 g 241

<210> 373
 <211> 241
 <212> DNA
 <213> Homo sapiens

<400> 373
 tactgaaaca gaaaaaatgt attcccacaa aagctgttac acagcggttt cccgtcccca 60
 gaagcagtag aaaatcttag cattccaatg gaaggcatgt atttgtaaaa tattctaaaa 120
 tcagctctat agtttccctg tccctcttga taagggatca gacagagggt gtgtccccct 180
 tcagcagcta cccttcttga caaactggtc tccaataata cctttcagaa acttacaaga 240
 c 241

<210> 374
 <211> 241
 <212> DNA
 <213> Homo sapiens

<400> 374
 caggtactaa aacttacaat aaatatcaga gaagccgtta gtttttacag catcgtctgc 60
 ttaaaagcta agttgaccag gtgcataatt tcccatcagt ctgtccttgt agtaggcagg 120
 gcaatttctg ttttcatgat cgggaatactc aaatatatcc aaacatcttt ttaaaacttt 180
 gatttatagc tctagaaaag ttatgttttt taatagtcac tctactctaa tcaggcctag 240
 c 241

<210> 375
 <211> 241
 <212> DNA
 <213> Homo sapiens

<400> 375
 aggtacaaag gaccagtatc cctacctgaa gtctgtgtgt gagatggcag agaacggtgt 60
 gaagaccatc acctccgtgg ccatgaccag tgctctgccc atcatccaga agctagagcc 120
 gcaaattgca gttgccaata cctatgcctg taaggggcta gacaggattg aggagagact 180

gcctattctg aatcagccat caactcagat tgttgccaat gccaaaggcg ctgtgactgg 240
g 241

<210> 376
<211> 241
<212> DNA
<213> Homo sapiens

<400> 376
ggtacatttt actttccttc tttcagaatg ctaataaaaa acttttgttt ataacttaaaa 60
aaaccataaa tcagacaaaac aaaagaaacg attccaacat cacttctgtg atgagaaaag 120
aggcaatgga attcaacata agcaaagaaa actctacctg gaggaagaa atcgatcagc 180
gaagaaacaa ctcggggctg ctgccagact gcaggccatg cgaggaggag cctcctagag 240
g 241

<210> 377
<211> 241
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 234
<223> n = A,T,C or G

<400> 377
tcctttctgt ccagggtgatt cacagactag acctttctta tcctcctcct agagttttga 60
cttgggactc tagtggttaag atgatgagcc cgtgcatcag gtccttctgc actttgggtg 120
aagtctccca gggtaggttt cctatttgaa acagtggaat catgtttcca gtgataaagt 180
ttaatgacct catccttttt tttttttttc tcacttgcca tttgtgtgtc ttanatgggt 240
t 241

<210> 378
<211> 241
<212> DNA
<213> Homo sapiens

<400> 378
aggtcagcga tcaggtcctt tatgggcagc tgctgggcag cccacaagc ccagggccag 60
ggcactatct ccgctgcgac tccactcagc ccctcttggc gggcctcacc ccagcccca 120
agtctatga gaacctctgg ttccaggcca gcccttggg gaccctggta accccagccc 180
caagccagga ggacgactgt gtctttgggc cactgctcaa cttccccctc ctgcagggga 240
t 241

<210> 379
<211> 241
<212> DNA
<213> Homo sapiens

<400> 379
tacggagcaa tcgaagaggc atatccacac ttgggggtggc tatagggtctg gaaaatgctg 60
aagatgactg ctttcaactga ggtcaaggat tgtaatatg ccagctttgt aaagccatta 120
aagcagaagt ttcttcagtg atcttctctc taagaaacac catcacctcc atgtgcctta 180
cagaggcccc ctgcgttctg ctgcattgct tttgcgcaat cccttgatga tgaagatgg 240

c 241

<210> 380
<211> 241
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 24, 25, 26, 34, 36, 56, 113, 129, 137, 184, 185, 208, 210, 237, 240
<223> n = A,T,C or G

<400> 380
acgtacacgc agaccgacat gggnnnttca ggcntnagat caaactcaaa acctgnaatg 60
atatccactc tcttttttctt aagctcaggg aaatattcca agtagaagtc canaaaagtca 120
tcggctaana tgcttcngaa tttgaattca tgcacatagg ccttgaaaaa actgtcaaac 180
tgannctgat caccacacaa gtgggcentn tatgacacaa agcagaaaacc tttctctant 240
g 241

<210> 381
<211> 241
<212> DNA
<213> Homo sapiens

<400> 381
aggtacaact taatggatta gcttttgggt ttaactgaat atatgaagaa attgggtctg 60
tctaaagaga gggatatttca tatggctttt agttcacttg tttgtatttc atcttgattt 120
ttttcttttg aaaataaaagc attctatttg gttcagattt ctcagatttg aaaaaggctc 180
tatctcagat gtagtaaaatt atttcctttc agtttgtgaa agcaggattt gactctgaaa 240
g 241

<210> 382
<211> 241
<212> DNA
<213> Homo sapiens

<400> 382
gtactgctat aatcaatacg tctgatagac aggtttatcc actatattga ccctacctct 60
aaaaggattg tcataattta tatgctttat gtttacacct atgatacagt tgccctggaa 120
cacaaaattt ttcattgtaa ttaaaaaaag aagagttgtg cagacagaag aaatcaaadc 180
taagaaaatc acaggagtag ataaatactc tagaattcat atacccttg aagatggggt 240
t 241

<210> 383
<211> 241
<212> DNA
<213> Homo sapiens

<400> 383
ggcaggtaca aagtcttctc tttgcttttt ataattttta agcaaataac acattttaact 60
gtattttaagt ctgtgcaa atcccttcag aagaaatadc caagattctg tttgcagagg 120
tcattttgtc tctcaaagat gattaaatga gtttgtcttc agataaagtg ctctgtcca 180
gcacaactca aaaggccttc aagctgttca gtaagtgtag ttcagataag actccgtcat 240

a 241

<210> 384
 <211> 241
 <212> DNA
 <213> Homo sapiens

<400> 384
 ggtacacaaa atacacttgc aagcttgctt acagagacct gttaaacaaa gaacagacag 60
 attctataaa atcagttata tcaacatata aaggagtgtg attttcagtt tgttttttta 120
 agtaaatatg accaaactga ctaaataaga aggcaaaaca aaaaattatg cttccttgac 180
 aaggcctttg gagtaaacia aatgctttaa ggctcctggt gaatgggggt gcaaggatga 240
 a 241

<210> 385
 <211> 241
 <212> DNA
 <213> Homo sapiens

<400> 385
 ggcagggtcta caatggctct gtcccttctg tggaatcggt acaccaagag gtctcagtc 60
 tgggtccctga cccacagtg agctgtttag atgaccttc acatcttct gatcaactgg 120
 aagacactcc aatcctcagt gaagactctc tggagccct caactctctg gcaccaggta 180
 ggtttggagg ctatgtccct ttaacttatc catgcagagt agccaaactt tacctgaaag 240
 a 241

<210> 386
 <211> 241
 <212> DNA
 <213> Homo sapiens

<400> 386
 aggtaccttt ttcctctcca aaggaacagt ttctaaagtt ttctgggggg aaaaaaaact 60
 tacatcaaatt ttaaaccata tggtaaactg catattagtt gtgttacacc aaaaaattgc 120
 ctacagctgat ctacacaagt ttcaaagtca ttaatgcttg atataaattt actcaacatt 180
 aaattatctt aaattattaa ttaaaaaaaaa aactttctaa gggaaaaata aacaaatgta 240
 g 241

<210> 387
 <211> 241
 <212> DNA
 <213> Homo sapiens

<400> 387
 accccaactgg ccgctgtgga gtatctccac tctccctcgt tgagggccgc tcccaccgac 60
 cagtcgaact ttcgtaaagt gagttaatgt gtttccactc cctttttccc ctttctggcc 120
 ttttgggtcca gaatttccgt gccttccggc atatcctggg agtcctcgac ttccaggaaa 180
 gccaatgtct ccccgatcac ctttaagacc cggaggacct attggacctg gaaatcctcg 240
 t 241

<210> 388
 <211> 241
 <212> DNA
 <213> Homo sapiens


```

<400> 388
tttgtagctct tgtccacagc agagacattg agtataccat tggcatcaat gtcaaaagtg 60
acttcaatct gaggaacacc tcgggggtgca ggaggtatgc ctgtgagttc aaacttgcca 120
agcaggttgt taccctttgt catggcacgc tcgccttcat aaacctgaat aagtacacca 180
ggctggttgt cagaataggt agtgaaggct tgtgtctgct tggtaggaat ggtggtatta 240
c                                                                241

```

```

<210> 389
<211> 241
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 6, 28, 38, 43
<223> n = A,T,C or G

```

```

<400> 389
tacctntggt agtgagcacc ttgtcttntg tgcttatntc ttnaagataa atacatggaa 60
ggatgtgaaa atcggaacac caactatgtg tctcactgca tctaagttaa gcagccacag 120
ctgtgagagt tttcaaagca gaaagatgct gatgtgacct ctggaattca gacatactga 180
gctatgggtc agaagtgttt tacttaaaaa gcaaacaatc cccaggaaat actgaatagg 240
a                                                                241

```

```

<210> 390
<211> 241
<212> DNA
<213> Homo sapiens

```

```

<400> 390
gcaggtacat ccacatgttc ctccaaatga cgtttggggt cctgcttgcc aacattcttt 60
attgccagct gttcaggtgt catcttatct tcttcttcta cagccttatt gtaattcttg 120
gctaattcca acatctcttt taccactgat tcattgcgtt tacaatgttc actgtagtcc 180
tgaagtgtca aaccttccat ccaactcttc ttatgcaaat ttagcaacat cttctgttcc 240
a                                                                241

```

```

<210> 391
<211> 241
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 2, 10, 14, 22, 23, 25, 40, 50, 57, 59, 65, 71, 72, 73, 76,
77, 78, 82, 83, 84, 95, 98, 100, 101, 102, 107, 148, 152,
155, 158, 163, 169, 170, 172, 180, 182, 192, 193, 198, 200,
202, 203, 206, 207, 208, 213, 214, 218, 220, 224, 225
<223> n = A,T,C or G

```

```

<221> misc_feature
<222> 235, 236
<223> n = A,T,C or G

```

<400> 391
 cnggcacaaan cttntgtttt tnntnttttt tttttttttt tctttatttn tttttantnt 60
 taaanaaaaa nnntannnaa annnggggtt aaatnctntn nncagancat taaaactgaa 120
 ggggaaaaaa aaaccaaaaa cgagcttntt anttnacntg ggnttgggnn gntgctgatn 180
 tnaagaagca anntttanan cnngcnnnat ganngagnn tcannttgaa atttnnacco 240
 t 241

<210> 392
 <211> 241
 <212> DNA
 <213> Homo sapiens

<400> 392
 gaggtactaa atggtatcct tagattaataa ttttgtgctt gataacagct gttttttcta 60
 cattagaaat aagatgccac acaagggaact acattccaga tttaaagaaa tgaaaggata 120
 ccattagtgt gtataacaga ttattgttca tacttgtaaa gcatcttatg tcattgagaa 180
 tataaagaac agtgccttag aagacagtga aaggtaagct ctagcttaat gtctatgatt 240
 t 241

<210> 393
 <211> 241
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> 57, 75, 224
 <223> n = A,T,C or G

<400> 393
 ggcaggtaca taagcataat cagttatgga cagcttcttg tataaattgc tattcancaa 60
 tacataaact gctnaaaga tttatgctta caggtagaca ttcaatttac caataaaaca 120
 gcatgttctg aaaatatggg cacattttta aacatattaa gacagttctg ttaaccataa 180
 tagtcccaca gtatgactga gtaataagaa tctacttcaa aagnaaaaaa aaaattaatc 240
 a 241

<210> 394
 <211> 241
 <212> DNA
 <213> Homo sapiens

<400> 394
 aggtacagca gcagtagatg gctgcaacaa ccttctctct accccagccc agaaaaatatt 60
 tctgccccac cccaggatcc gggaccaaaa taaagagcaa gcaggcccc ttactgagg 120
 tgctgggtag ggctcagtgc cacattactg tgctttgaga aagaggaagg ggatttgttt 180
 ggcactttta aaatagagga gtaagcagga ctggagaggg cagagaagat accaaaattg 240
 g 241

<210> 395
 <211> 241
 <212> DNA
 <213> Homo sapiens

<220>

<221> misc_feature
 <222> 1, 5, 8, 9, 14, 24, 26, 28, 32, 42, 54
 <223> n = A,T,C or G

<400> 395
 nggcnggnnc caanatatga aatntnanta tnatacatga tnaaaagctt tatntatttt 60
 agtgagtaat taagtttaca ctgtgaataa ggattaattc ccagatgacc atctacagtt 120
 actaccacat agaggggtata cacggatgga tcgattacaa gaatataaaa cttattttcc 180
 ttcctgtatc cacatttctt tgcaatgtga atttgcaggc cctctcaaga agtggagtct 240
 a 241

<210> 396
 <211> 241
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 26
 <223> n = A,T,C or G

<400> 396
 gaggtacacc ttgaatgaca atgctnggag cccccctgtg gtcacgcacg cctccactgc 60
 cattgatgca ccatccaacc tgcgtttcct ggccaccaca cccaattcct tgctgggtatc 120
 atggcagccg ccacgtgccg ggattaccgg ctacatcatc aagtatgaga agcctggggtc 180
 tcctcccaga gaagtgggtc ctcggccccg ccctggtgtc acagaggcta ctattactgg 240
 c 241

<210> 397
 <211> 241
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 90
 <223> n = A,T,C or G

<400> 397
 ggcaggtacc agcaggggga tgtgtttctg gggaattgtg gctctggaag cttcacgggtt 60
 tcccagaatg tggaaaatat atctgtgcan gatagaaatc ctgcccagag gctgtttctg 120
 tctcatttga gctctccttc atgtggcaga gctgactgtg gcggtttagg agcctacatt 180
 ttagaaaagc ttacctcaaa gttctgcatt gagcctgagc actggaaagg agataaaata 240
 a 241

<210> 398
 <211> 241
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 3, 11, 22, 27, 38, 41, 53, 59, 63, 69, 77, 78, 94, 131, 133,
 137, 149, 154, 162, 166, 167, 172, 175, 176, 179, 191, 230

<223> n = A,T,C or G

<400> 398

```
gangtgacca ngacatcacc tnacacntgg aaagcganga nttgaatggt gentacaang 60
ccntaccnt tgcccannac ctgaacgcg cttntgattg ggacagccgt gggaaggaca 120
gttatgaaac nantcanctg gatgaccana gtgntgaaac cnacannac angcnntcna 180
cattatataa ncggaagct aatgatgaga gcaatgatca ttccgatgtn attgatagtc 240
a 241
```

<210> 399

<211> 241

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 212, 226

<223> n = A,T,C or G

<400> 399

```
cagagtgaga tgggagtggg agggccaatc tgatacagaa gggggtgaag ggtagggccc 60
ctgagcagcc cacccttac cctgacgaag gcaatcctcc tctggaatgt ctcttccctc 120
ttcagttctg gttctgcctc agccacgaac tgggaaggag tgaggaacat cccaacggca 180
atgagagtat ccagtgact ccaaacagga angaatcagt gttcanaaag tcagggccct 240
t 241
```

<210> 400

<211> 241

<212> DNA

<213> Homo sapiens

<400> 400

```
ggtactcttg ctcttttagc tagagtgtat gtgaaaataa agaaatacat cattgtattc 60
acaaccatgt gtcttcattt ataactttt gtttaaaaaa tttttagttc aagtttagtt 120
cattgatatt atcctotgaa tgcagttaag gctgggcaga aattctactc atgtgacatc 180
tgccacaggt ctattttgaa gcttttcttc taatgggcaa tgtttgcct taccaggatt 240
t 241
```

<210> 401

<211> 241

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 1, 2

<223> n = A,T,C or G

<400> 401

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nncaggtact ttgtagagca gagagaggct ttggttcctc ctttcttcaa tcacgtggag 60
atgtgtcatc acctgggatt tcatctgggc cgccttttct gggtaaacag ccaacacatg 120
ctggaatga cggatggat gtaagcgatc tttgttctca gcacggacat aacgccgtaa 180
ggcctggaga atgcgatgag gccgtggcgg gtcagactgc aaggcagcca ggtagttctc 240
c 241
```

<210> 402
 <211> 241
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 26, 27
 <223> n = A,T,C or G

<400> 402
 ggcagggtcca aaaaaaacct aaaaanngtt tcaggaatgt agagaaatat ccaacttaaa 60
 tagcgaaaaa gtgcaccata attactgctg cactgcagtc atttctgcaa ttcccatgtt 120
 tcttaataaa ctatcttgct agataacaca caatataaag agcaattatg aaaaacagac 180
 atttacatat acttctaaag tcttattggg aatatcctgt ttggccattg ggataaccaa 240
 t 241

<210> 403
 <211> 241
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 49
 <223> n = A,T,C or G

<400> 403
 aggtgttaac taccgctcc gagacgggat tgatgacgag tcctatgang ccattttcaa 60
 gccggtcatg tccaaagtaa tggagatggt ccagcctagt gcggtggtct tacagtgtgg 120
 ctgagactcc ctatctgggg atcggttagg ttgcttcaat ctaactatca aaggacacgc 180
 caagtgtgtg gaatttgtca agagctttaa cctgcctatg ctgatgctgg gaggcggtgg 240
 t 241

<210> 404
 <211> 241
 <212> DNA
 <213> Homo sapiens

<400> 404
 cagggtactgc aaccataaaa atactgtttc ctcataattc accttcctta atttggagtt 60
 ttctgtcttc ttttcaaggc attcaaagta ggaataaact ttgcttgtgt tgggtggata 120
 ttgtttatag tgagtaacct tgtaggagtc ggtggccagg aggatgttga actcggcttc 180
 tgccgcagga ttcatctcgg gccggaggac aaggggcccg cgcgccgcga gctccctgac 240
 c 241

<210> 405
 <211> 266
 <212> DNA
 <213> Homo sapiens

<400> 405
 ttctgggctg gggagtggag agaaagaagt tgcagggctt acaggaaatc ccagagcctg 60

```
<210> 406
<211> 231
<212> DNA
<213> Homo sapiens
```

```
<210> 407
<211> 266
<212> DNA
<213> Homo sapiens
```

```
<210> 408
<211> 261
<212> DNA
<213> Homo sapiens
```

```
<210> 409
<211> 266
<212> DNA
<213> Homo sapiens
```

$$\begin{array}{ll} \langle 210 \rangle & 410 \\ \langle 211 \rangle & 181 \end{array}$$

<212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 9, 17, 24, 26, 65, 97, 98, 99, 100, 103, 105, 106, 107, 108,
 120, 121, 123, 142, 145, 149, 162, 177
 <223> n = A,T,C or G

<400> 410
 caaaaggtnc tttttgntca aaancnattt ttatttcottg atattttttct tttttttttt 60
 tttgnggatg gggacttggtg aatttttcta aagggggnnnn ttannnnngg aagaaaaccn 120
 ngntccggtt ccagccaaac cngtngctna ctttccacct tntttccacc tccctcnggt 180
 t 181

<210> 411
 <211> 261
 <212> DNA
 <213> Homo sapiens

<400> 411
 gcccctgcag tacttggccg atgtggacac ctctgatgag gaaagcatcc gggctcacgt 60
 gatggcctcc caccattcca agcggagagg ccgggcgtct tctgagagtc agggctctagg 120
 tgctggagtg cgcacggagg ccgatgtaga ggaggaggcc ctgaggagga agctggagga 180
 gctggccagc aacgtcagt accaggagac ctctccgag gaggaggaag ccaaggacga 240
 aaaggcagag cccaacaggg a 261

<210> 412
 <211> 171
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 1, 6, 53, 79, 91, 96, 114, 132
 <223> n = A,T,C or G

<400> 412
 nttttntctt tacaattcag tcttcaacaa cttgagagct ttcttcatgt tgncaagcaa 60
 cagagctgta tctgcaggnt cgtaagcata nagacngttt gaatatcttc cagnataatc 120
 ggctctaact gncagagatg ggtcaacaaa cataatcctg gggacatact g 171

<210> 413
 <211> 266
 <212> DNA
 <213> Homo sapiens

<400> 413
 ttaggaccaa agatagcatc aactgtattt gaagggaactg tagtttgccg attttatgac 60
 atttttataa agtactgtaa ttctttcatt gaggggctat gtgatggaga cagactaact 120
 cattttgtta tttgcattaa aattattttg ggtctctgtt caaatgagtt tggagaatgc 180
 ttgacttggt ggtctgtgta aatgtgtata tatatatacc tgaatacagg aacatcggag 240
 acctattcac tcccacacac tctgct 266

<210> 414
 <211> 266
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 86, 153, 162, 178, 184, 205
 <223> n = A,T,C or G

<400> 414
 tttgccataa ttgagtgaag agtggcagat ggcattaact ctgctccgct tcaagctggc 60
 tccatgacca ctcaaggcct cccancctg ttcgtcaagt tgcctcaag tccaagcaat 120
 ggaatccatg tgtttgcaaa aaaagtgtgc tanttttaag gnccttcgta taagaatnaa 180
 tganacaatt ttcctaccaa aggangaaca aaaggataaa tataatacaa aatatatgta 240
 tatgggtggt tgacaaatta tataac 266

<210> 415
 <211> 266
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 37, 103, 223
 <223> n = A,T,C or G

<400> 415
 cctccatcca gtctattaat tgttgccggg aagctanagt aagtagttcg ccagttaata 60
 gtttgcgcaa cggtgttgcc attgctacag gcctcgtggt gtnacgctcg tcgattggta 120
 tggtttcatt cagctccggt tcccaacgat caaggcgagt tacatgatcc cccatgttgt 180
 gcaaaaaagc ggtagctcc ttcggtcctc cgatcgttgt canaagtaag ttggccgcag 240
 tgttatcact catggttatg gcagca 266

<210> 416
 <211> 878
 <212> DNA
 <213> Homo sapiens

<400> 416
 cctgacgata gccatggctg taccacttaa ctatgattct attccaactg ttcagaatca 60
 tatcacaaaa tgacttgtag acagtagttt acaacgactc ccaagagagg aaaaaaaaaa 120
 aaaaagacgc ctcaaaattc actcaacttt tgagacagca atggcaatag gcagcagaga 180
 agctatgctg caactgaggg cacatatcat tgaagatgtc acaggagttt aagagacagg 240
 ctggaaaaaa tctcatacta agcaaacagt agtatctcat accaagcaaa accaagtagt 300
 atctgctcag cctgccgcta acagatctca caatcaccaa ctgtgcttta ggactgtcac 360
 caaagtcaga ttcggtgcta accaggtggc atctatgatc aacgtcgccc ctcttattta 420
 acaaagggct ctgaaggagg tgttctccaa gcaacaagga gactgcttca gtacaagact 480
 ttgcaccttg aattcaattg catcaagtgt ggatagcaaa ataagtatct taccattgaa 540
 atatgtgttc agcctaagat tttaccacc agcagaacaa aagtgagggg gagaggggatg 600
 ggccagttag gggatggggg agaaaaaaa atcacaggat taccaccaa gccttggttt 660
 aaaagggtc ccttactat tcaggaaggg aagtggagg agaaattaac caattcctgc 720
 cacagcagcc ctttttggt gcttccacaa tagatacttt atggagtggc acagccaacc 780
 ctatctgtga cctgccctgc ggataaacac agccaagcag gtttaattag atcaaagaca 840

caaagggcta ttccctcctt tcataacaac gcagacct

878

<210> 417

<211> 514

<212> DNA

<213> Homo sapiens

<400> 417

```

ttctgacttc tagaagacta aggctggctc gtgtttgctt gtttgccac ctttggtga 60
taccagaga acctgggcac ttgtgcctg atgccaccc ctgccagtca ttccctccatt 120
caccagcgg gaggtgggat gtgagacagc ccacattgga aaatccagaa aaccgggaac 180
agggatttgc ctttcacaat tctactcccc agatcctctc ccctggacac aggagaccca 240
cagggcagga ccctaagatc tggggaaaag aggtcctgag aaccttgagg tacccttaga 300
tccttttcta cccactttcc tatggaggat tccaagtcac cacttctctc accggcttct 360
accagggctc aggactaagg cgttttctcc atagcctcaa cattttggga atcttccctt 420
aatcaccctt gtcctcctg ggtgcctgga agatggactg gcagagacct ctttggttgcg 480
ttttgtgctt tgatgccagg aatgccgcct agtt 514

```

<210> 418

<211> 352

<212> DNA

<213> Homo sapiens

<400> 418

```

ctgcaccagc gattaccagt ggcattcaaa tactgtgtga ctaaggattt tgtatgctcc 60
ccagtagaac cagaatcaga caggtagtag ctagtcaaca gcaagtcttt gttggattcg 120
agtaggctca ggatctgctg aaggctcggag gagttagtcc ccgcaatcaa gagcctgtct 180
tcctgaagcc cttggtgata ttttgccact cagccaagaa tgaggatgca tccttcagat 240
tctctatgtc ccgaacctgg aaccatcca cgccagcttg cagccaaaac tccagagcat 300
ccttcacctt ggtggaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aa 352

```

<210> 419

<211> 344

<212> DNA

<213> Homo sapiens

<400> 419

```

ctggacacca taatcccttt taagtggctg gatggtcaca cctctcccat tgacaagctg 60
ggttaagtca ataggttgac taggatcaac acgacccaaa tcaataagat actgcagtct 120
attgagactc aaaggcttat actggcgtct gaaactatgt ccttcgttaa acccgatttt 180
tgggattcgg atgtaaaatg gagtctggcc tccctcaaag cccaagcggg gccgggttcc 240
tctttgcctt tctcctttat ggcctctgcc acattttcta cctcttctcc gacctcttgg 300
tcttctctcc ggtttcttgg agccgggatt cggctttaag ttgg 344

```

<210> 420

<211> 935

<212> DNA

<213> Homo sapiens

<400> 420

```

cgaaagtcaa cgtaaggagg ctcagggtgaa ccatgatgat gaccttctgt tgactttgaa 60
atattggctc ttgtgggtga caaaagccag acaagctgtg gctgtggtcc gattttaaga 120
cgaggttctc aaagatccaa aggagggaaa gggatttggg aacactgtgt atcatctgag 180
acacacgtgt cctcatgac ttaaagtgcct actttaaaag cacctaatac tgcccttcat 240

```

```

tgtggtcaga agagatttct acaaaagcac tcagaattct ggaggcagtt gtgattttgc 300
catgtggcag ttggttttgt gagttgggca ggtgtgaaag ggtaaaactc cacttctgaa 360
tgctgcttct gccccctggg acccagcaca ttggttagacc atcttcttga ctgaaaattc 420
tctcctgatg ctgagccctg caccaccacc ttctttttcc taactatgaa ttgatggcaa 480
agtccactca aaacaaccag ttaagtgtc acgagagagt agtcaagcac ctccagaaaag 540
aaaccgggtt tttgttcaca tagcaggaag tgactccctg ggtggtaatt tatcttggaa 600
acacaggtag attggcagaa aaacgggaac atgtaggtac cgcgatgttg gtgcatgtcc 660
attacttttg gataggcttt ctcatgtctt cctcaaataga tagttgagcc agttttccag 720
tggcaattct gagtgacttg cgcttgtctt atggtgtggt caagggacgt tcagaactac 780
ggaaaacttt tactgaaaca gcgaagcaga gtataccggc atgagaggga agatgaacac 840
tcacctatgt accactcttt gacaataaat atagtatttc tcaaaaaaaaa aaaaaaaaaa 900
agtaaaaaaa ctgaaatcgc aagtcaaaaa atcca                                     935

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```

<210> 421
<211> 745
<212> DNA
<213> Homo sapiens

```

```

<400> 421
ggcttcgagc ggccgcccgg gcaggctcta gatgtcattt gggacccttc acaaccattt 60
tgaagccctg tttgagtcct tgggatatgt gagctgtttc tatgcataat ggatattcgg 120
ggttaacaac agtcccctgc ttggcttcta ttctgaatcc ttttctttca ccatgggggtg 180
cctgaagggt ggctgatgca tatggtacaa tggcaccag tgtaaagcag ctacaattag 240
gagtggatgt gttctgtagc atcctattta aataagccta ttttatcctt tggcccgctca 300
actctgttat ctgctgcttg tactggtgcc tgtacttttc tgactctcat tgaccatatt 360
ccacgaccat ggttgtcatc cattacttga tcctacttta catgtctagt ctgtgtggtt 420
ggtggtgaat aggcttcttt ttacatggtg ctgccagccc agctaattaa tgggtgcacgt 480
ggacttttag caagcgggct cactggaaga gactgaacct ggcattggaat tcctgaagat 540
gtttgggggt tttttctttc ttaatcgaaa gttaacattg tctgaaaagt tttgttagaa 600
ctactgcgga acctcaaaat cagtagattt ggaagtgatt caaagctaaa ctttttcctt 660
ggccctcctt gtgttcta at tgcttgcaag tgtaatacta ggatgtccaa gatgccagtt 720
tttgcttctt tgttagttgt cagac                                     745

```

```

<210> 422
<211> 764
<212> DNA
<213> Homo sapiens

```

```

<400> 422
gagttcagta gcaaagtcac acctgtccaa ttccctgagc tttgctcact cagctaattg 60
gatggcaaag gtgggtggtgc tttcatcttc aggcagaagc ctctgcccat cccctcaag 120
ggctgcaggc ccagttctca tgctgccctt ggggtgggcat ctgttaacag aggagaacgt 180
ctgggtggcg gcagcagctt tgetctgagt gcctacaaag ctaatgcttg gtgctagaaa 240
catcatcatt attaaacttc agaaaagcag cagccatggt cagtcaggct catgctgcct 300
cactgcttaa gtgcctgcag gagccgctg ccaagctccc ctctctacac ctggcacact 360
ggggtctgca caaggctttg tcaaccaaag acagcttccc ccttttgatt gcctgtagac 420
tttgagacca agaaacactc tgtgtgactc tacacacact tcagggtggt tgtgcttcaa 480
agtcattgat gcaacttgaa aggaacagct ttaatgggtg aaatgaacta ccatttataa 540
cttctgtttt tttattgaga aaatgattca cgaattccaa atcagattgc caggaagaaa 600
taggacgtga cggtactggg ccctgtgatt ctcccagccc ttgcagtccg ctaggtgaga 660
ggaaaagctc tttacttccg cccctggcag ggaattcttg gttatgggag aaaccagaga 720
tggaatgag gaaaatatga actacagcag aagccctgg gcag                                     764

```

```

<210> 423

```

<211> 1041
 <212> DNA
 <213> Homo sapiens

<400> 423

```
ctcagagagg ttgaaagatt tgcctacgaa agggacagtg atgaagctaa gctctagatc 60
caggatgtct gacttcaa atgaaactccc aaagtaatga gtttggaagg gtggggtgtg 120
gcctttccag gatgggggtc tttctgctc ccagcggata gtgaaacccc tgtctgcacc 180
tggttgggcg tggtgctttc ccaaagggtt ttttttagg tccgtcgtg tcttgtggat 240
taggcattat tatctttact ttgtctccaa ataacctgga gaatggagag agtagtgacc 300
agctcagggc cacagtgcga tgaggaccat cttctcacct ctctaaatgc aggaagaaac 360
gcagagtaac gtggaagtgg tccacaccta ccgccagcac attgtgaatg acatgaaccc 420
cggcaacctg cacctgttca tcaatgccta caacaggatg tgggatgtag ttcagccaca 480
tcattgctat ttatgagggt tcttctgtag atccgaaatg tgggacagat gagagggaga 540
gtataaaatg agcgaagag gcaggctctg agtttgagca aatagattaa taggacagg 600
gtccccagga aggacacctg gcctgtaagc tggttcctgg cattcagctc gccttgcagg 660
gatctgaaca aacactccag accactggg gtgcagacgt gagagggacg cagtcgcaca 720
ctcagagggt tgagagtaaa tatgtgtgcc cgctgctgac cttcacgaaa ggccaaatgt 780
aagaagagct aagtgagaga gcagcaaagc actcctggag gccggggata atccaggcag 840
gcttctggga gtttgtcatt ccaaggataa ggaggacctg aacatggcct ttgcctaagg 900
cgtggccctc tcaaccagca ctagggtgct atctggagct cagctagggg aggagacagc 960
tcagggccat tgggtgtcagc cagagactct gtaatcttcc agggagctcg ctcaacctgc 1020
tgagctcgct ctgccacgca c 1041
```

<210> 424
 <211> 1288
 <212> DNA
 <213> Homo sapiens

<400> 424

```
ctaagaactg agacttgtga cacaaggcca acgacctaag attagcccag ggttgtagct 60
ggaagacctg caacccaagg atggaaggcc cctgtcacaa agcctaccta gatggataga 120
ggacccaagc gaaaaaggta tctcaagact aacggccgga atctggaggc ccatgaccca 180
gaacccagga aggatagaag cttgaagacc tggggaaatc ccaagatgag aaccctaaac 240
cctacctctt ttctattgtt tacacttctt actcttagat atttccagtt ctctgttta 300
tctttaagcc tgattctttt gagatgtact ttttgatgtt gccggttacc tttagattga 360
cagtattatg cctgggccag tcttgagcca gctttaaatc acagctttta cctatttggt 420
aggctatagt gttttgtaaa cttctgtttc tattcacatc ttctccactt gagagagaca 480
ccaaaatcca gtcagtatct aatctggctt ttgttaactt ccctcaggag cagacattca 540
tataggatgat actgtatttc agtctttct tttgacccca gaagccctag actgagaaga 600
taaaatggtc aggttggttg ggaaaaaaa gtgccaggct ctctagagaa aaatgtgaag 660
agatgctcca ggccaatgag aagaattaga caagaaatac acagatgtgc cagacttctg 720
agaagcacct gccagcaaca gcttcttct ttgagcttag tccatccctc atgaaaaatg 780
actgaccact gctgggcagc aggagggatg atgaccaact aattcccaa cccagctctc 840
attggtacca gccttgggga accacctaca cttgagccac aattggtttt gaagtgcatt 900
tacaagtttc tggcatcact accactactg attaaacaag aataagagaa cattttatca 960
tcatctgctt tattcacata aatgaagtgt tgatgaataa atctgctttt atgcagacac 1020
aaggaattaa gtggcttcgt cattgtcctt ctacctcaaa gataatttat tccaaaagct 1080
aagataaatg gaagactctt gaacttgtga actgatgtga aatgcagaat ctcttttgag 1140
tctttgctgt ttggaagatt gaaaaatatt gttcagcatg ggtgaccacc agaaagtaat 1200
cttaagccat ctataggtca caattgaaac aaactgggga gttgggtgct attgtaaaat 1260
aaaatatact gttttgaaaa aaaaaaac 1288
```

<210> 425

<211> 446
 <212> DNA
 <213> Homo sapiens

<400> 425
 ccacttaaag ggtgcctctg ccaactggtg gaatcatcgc cacttccage accacgccaa 60
 gcctaacatc ttccacaagg atcccgatgt gaacatgctg cacgtgtttg ttctgggcca 120
 atggcagccc atcgagtacg gcaagaagaa gctgaaatac ctgccctaca atcaccagca 180
 cgaatacttc ttcttgattg ggccgccgct gctcatcccc atgtatttcc agtaccagat 240
 catcatgacc atgatcgctc ataagaactg ggtggacctg gcctgggccc tcagctacta 300
 catccggttc ttcatcacct acatcccttt ctacggcatc ctgggagccc tccttttcct 360
 caacttcac caggttcctgg agagccactg gtttgtgtgg gtcacacaga tgaatcacat 420
 cgtcatggag attgaccagg aggacc 446

<210> 426
 <211> 874
 <212> DNA
 <213> Homo sapiens

<400> 426
 tttttttttt tttttttttt ttttttcaat taaagatttg atttattcaa gtatgtgaaa 60
 acattctaca atggaaactt ttattaaatg ctgcatgtac tgtgctatgg accacgcaca 120
 tacagccatg ctgtttcaga agacttgaaa tgccattgat agtttaaaaa ctctacaccc 180
 gatggagaat cgaggaagac aatttaatgt ttcatctgaa tccagagggtg catcaaatta 240
 aatgacagct ccacttgga aataatagct gttacttgat ggtatccaag aagaaatggg 300
 tgggtgatgga taaattcaga aatgcttccc caaagggtgg tggtttttaa aaagttttca 360
 ggtcacaacc ctgacagaaa aactgatgc ccaacacact gattcgcggt ccaggaaaca 420
 cgggtcttcc aagttccaag gggtgagggt tcccaacga tcaagttcct gtgctgtaat 480
 caagagggtc ctttgactg gatagggagc acttgggagc tgtacaccat cagtcataat 540
 ggatggcagt gtaaaagatg atccaaatga cctgagatgc tctgaggag tgggtgcacca 600
 gaccaggag tgccactgta gggtgcttct tttgctttag tcatcacaca cacacacagc 660
 tccagagcag caatggcctt tccgtgaaca ggaaaaaagc ctctgctat tcccaagaac 720
 cctcgtaatg gcaaaactcc ccaaatagaca cccaggacca cagcaatgat ctgtcggaac 780
 cagtagatca catctaaaaa ttcatacctta tctcccagg ccgcgtcgct ccgcagcacc 840
 ttactccaga cggagacttt gagggccccg ttgg 874

<210> 427
 <211> 638
 <212> DNA
 <213> Homo sapiens

<400> 427
 acttgtaatt agcaacttggg gaaagctgga aggaagataa ataacactaa actatgctat 60
 ttgatttttc ttcttgaaaag agtaaggttt acctgttaca ttttcaagtt aattcatgta 120
 aaaaatgata gtgattttga tgtaatttat ctcttgtttg aatctgtcat tcaaaggcca 180
 ataatttaag ttgctatcag ctgatattag tagctttgca accctgatag agtaaataaa 240
 ttttatgggc ggggtgccaaa tactgctgtg aatctatttg tatagtatcc atgaatgaat 300
 ttatggaaat agatatttgt gcagctcaat ttatgcagag attaaatgac atcataatac 360
 tggatgaaaa cttgcataga attctgatta aatagtgggt ctgtttcaca tgtgcagttt 420
 gaagtattta aataaccact cctttcacag tttattttct tctcaagcgt tttcaagatc 480
 tagcatgtgg attttaaaaag atttgccttc attaacaaga ataacattta aaggagattg 540
 tttcaaaaata tttttgcaaa ttgagataag gacagaaaga ttgagaaaca ttgtatatatt 600
 tgcaaaaaca agatgtttgt agctgtttca gagagagt 638

<210> 428
 <211> 535
 <212> DNA
 <213> Homo sapiens

<400> 428
 acaagatgat tcttcctcct caatttgaca gatcaaagaa gtatcccttg ctaattcaag 60
 tgtatggtgg tccctgcagt cagagtgtaa ggtctgtatt tgctgttaat tggatatctt 120
 atcttgcaag taaggaaggg atggtcattg ccttggtgga tggtcgagga acagctttcc 180
 aaggtgacaa actcctctat gcagtgtatc gaaagctggg tgtttatgaa gttgaagacc 240
 agattacagc tgtcagaaaa ttcatagaaa tgggtttcat tgatgaaaaa agaatagcca 300
 tatggggctg gtcctatgga ggatacgttt catcactggc ccttgcactt ggaactggtc 360
 ttttcaaattg tggatatgca gtggctccag tctccagctg ggaatattac gcgtctgtct 420
 acacagagag attcatgggt ctcccaacaa aggatgataa tcttgagcac tataagaatt 480
 caactgtgat ggcaagagca gaattattca gaaatgtaga ctatcttctc atcca 535

<210> 429
 <211> 675
 <212> DNA
 <213> Homo sapiens

<400> 429
 actattttca accctgagca ttaacactgc ataccaaggg ggggtgggtc aagaagctgg 60
 ttagatcgaa gcacaagcac aagccactga tattctctat gtgatcaggt ttttacaaaa 120
 aaatacatag ttttcaataa ataatgctta attttacaac tttgatacag caatgtcata 180
 caccgtttca acacactaca ctctgcatgc tagatagtct acgagaagac gaaactttgc 240
 catgcatitt ctttcccccc tagtgctatc aaacacttca tctccagcg cactgcctca 300
 ggtagcttta ccttctctct gtttcacagc aataggccgt gcgctggcat gcaaactcta 360
 aaaaagggtc cccccacaaa ccactcagac ttctacacaa aagggttttt cagcttttct 420
 gctcccaaac ctggagtggc taagaaagta agtttcatgt ggccttgga aatacacact 480
 tggttaacagt gtcattgtga aaactgctct aaaacatcag gtggttctgt cctggtggcc 540
 gtcacgaagc attatgggat gccataacca ctaggagtcc caaaccgga aaaataggcc 600
 tccgttttaa aacagtcaat tcaaaaaagg tgtcacagaa caaatgcaaa agactcttaa 660
 acccacaaca tatgt 675

<210> 430
 <211> 434
 <212> DNA
 <213> Homo sapiens

<400> 430
 acctctgcca gaagtccagc gagaggacct cacagtagag cacaggccac tccgggagtg 60
 catcagaaga ttcactctca tggaggaaga aggtttcaaa cgtgaatggg taggagaagt 120
 gagccacctt gtccattgcc agggacttgg tgggtgcaggt ctgtgttact cctgagagct 180
 gctggaatgc tgggcttgac cagtgagcag ttggcaattc taaaaagaag tggacgtaga 240
 gattgtcata ctcatagcct tgggctgaaa cgacctctcc atttacaaag agccggaggg 300
 cacctgggac agtcatctca aagtccggtc ctacgaggct gctgagatac tccttgtgcc 360
 ggccataaag atccttgaac actcgcogtt cccgctcctc ctccctccggc tgtgcgtggg 420
 gggaaacatt gtcg 434

<210> 431
 <211> 581
 <212> DNA
 <213> Homo sapiens

<400> 431

```

acacaagcct ccagcccgcac ccagcggcct aatgaaactc tggcaacctc tcctgggcgt 60
ggccacgagt atccagctcc aagcccaagt gaggcgggga gtcaacttcc ccatgattgc 120
caagtgacca agaccagaag cagggacgat taggctagtt ctgcggcaag gtgaactgga 180
gaccctgtct ctgcccctct tccctggcct gtcccacaga catcccgttg ttttaaccac 240
tgccttttgca aggacctgct ctgtccactc caaatcaaag gatacttgca tccttcttac 300
acagactccc atctctctgc tcatagtggc ccagagctgc ccgagaaaaa gaaacttggg 360
tcagtagaag gctcattagt gtgaaggagt gagaggccag gccttcctgt gacataatgc 420
ttctatgctt gtttcctaaa cacttggtcc acacacaata cctgggcagg aagagagAAC 480
caagcaccac tggatggctc tggagccagg ggacttctat gcacatacaa ccaacatcac 540
cccactctgc tcatctgtgc ctccaccctg aacagcagag t 581

```

<210> 432

<211> 532

<212> DNA

<213> Homo sapiens

<400> 432

```

actccaactc aagttttacaa gttacacctt tgccacagcc ttggctaaat cttgaactag 60
tgcagaattc agctgtggta gagtgtgat cttagcatgc ttcgatgtgg catacttggt 120
cttgacagtc atgtgctttg taagtccttg atttaccatg actacattct tagccagggtg 180
ctgcataact ggaagaagag attcttcagt atatgacagg taatgttgta gagttgggtg 240
ccattcacca ttatccagaa ttttcagtg ctaagcaaaaa gtcctgtctg caatttgaga 300
aggaggaaa gtcaccatgt catagtccaa catagttagt tccatcagggt atttggccaa 360
agtatgttgc tcgacatcaa cctctccaat cttagatgct ctccgaagga agtgcaaagg 420
tagaggccga ccagaccaa agtttaaagc tcttagaatc ttcatttcca tctgtctgat 480
ttggtgctta gtataagtgt tgtcagtcac aaaagcaaag tcaccaatct ct 532

```

<210> 433

<211> 531

<212> DNA

<213> Homo sapiens

<400> 433

```

acttggtttt acagctcctt tgaaaactct gtgttttgaa tatctctaaa aacatagaaa 60
aactacagt ggttttagaaa ttactaatct tacttctaag tcattcataa acctgtgcta 120
tgaaatgact tcttaaatat ttagttgata gactgctaca ggtaataggg acttagcaag 180
ctcttttata tgctaaagga gcatctatca gattaagtta gaacatttgc tgtcagccac 240
atattgagat gacactagg gcaatagcag ggatagattt tgttgggtgag tagtctcatg 300
ccttgagatc tgtgggtggc ttcaaaatgg tggccagcca gatcaaggat gtagtatctc 360
atagttccca ggtgatattt ttcttattag aaaaatatta taactcattt gttgtttgac 420
acttatagat tgaaatttcc taatttattc taaattttta gtggttcttt ggttccagtg 480
ctttatgttg ttgttgtttt tggatgggtg tacatattat atgttctaga a 531

```

<210> 434

<211> 530

<212> DNA

<213> Homo sapiens

<400> 434

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acaagagaaa acccctaaaa aaaggatggc tttagatgac aagctctacc agagagactt 60
agaagttgca ctagctttat cagtgaagga acttccaaca gtcaccacta atgtgcagaa 120
ctctcaagat aaaagcattg aaaaacatgg cagtagtaaa atagaaacaa tgaataagtc 180

```

```

tctcatatc tctaattgca gtgtagccag tgattattta gatttggata agattactgt 240
ggaagatgat gttggtggtg ttcaagggaa aagaaaagca gcatctaaag ctgcagcaca 300
gcagaggaag attcttctgg aaggcagtga tggatgatag gctaatgaca ctgaaccaga 360
ctttgcacct ggtgaagatt ctgaggatga ttctgatttt tgtgagagtg aggataatga 420
cgaagacttc tctatgagaa aaagtaaagt taaagaaatt aaaaagaaag aagtgaaggt 480
aaaatcccca gtagaaaaga aagagaagaa atctaaatcc aaatgtaatg 530

```

```

<210> 435
<211> 677
<212> DNA
<213> Homo sapiens

```

```

<400> 435
accttatgat ctaattaata gatattagaa acagtagaaa gacaagttac acgtcaatgc 60
ccaatgacta gagtcaacat taaagagttg taatttaagt aatccaaact gacatctaata 120
tccaaaatca tttataaaat gtatttggct ttggaatcca caggacttca aacaagcaaa 180
gtttcactgc agatagtcac aaagatgcag atacactgaa atacttaaga gccttattaa 240
tgatttttgt tattttggat cttctgtttt tttcttatta tgggccgaag cctccttaat 300
accaatttat cagacagaag catgtcatct tgttgttcaa gataatccag taaattttca 360
gtccattcaa gtgccgcttt atggctaata cgcttctctg gattcagttc tgtttttcta 420
ctcttactgg aaggcttttg ctccagcagc ttggctctgg cctcagcact ttcactgtca 480
gtcagcacct gacagcttga gtcactgtc cgagagtcga accactgatc aatattctca 540
atgtcaacat gttcacattc ttctgtgttc tgtaaaactg ttgctaaatt agctgctaaa 600
atggctcctt catcaatggt catacctgaa ttctcttcat tgccagggaa aagttttttc 660
catgctttgg ttatggt 677

```

```

<210> 436
<211> 573
<212> DNA
<213> Homo sapiens

```

```

<400> 436
acctcttagg gtgggagaaa tgggtgaagag ttgttcttac aacttgctaa cctagtggac 60
agggtagtag attagcatca tccggataga tgtgaagagg acggctgttt ggataataat 120
taaggataaa atttggccag ttgacagatt ctgtttccag cagtttttac agcaacagtg 180
gagtgttcca gtattgtgtt cctgtaaatt taattttgat ccgcaatcat ttggtatata 240
atgctgtttg aagttttgtc ctatttgaaa agtcttgtgt tgcaggggtg cagttaagat 300
ctttgtgatg aggaatggga tgggctaatt ttttgccgtt ttcttggaat tgggggcatg 360
gcaaatacag tagggtagtt tagttcttta cacagaacat gataaactac acctgttgat 420
gtcaccgtct gtcaatgaat attatagaag gtatgaaggt gtaattacca taataacaaa 480
acaccctgtc tttagggctg acctttcgtc ctttgacctc ctcagcctcc attcccatct 540
tcgctcagac tgcaagtatg tttgtattaa tgt 573

```

```

<210> 437
<211> 645
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 605
<223> n = A,T,C or G

```

```

<400> 437

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```

acaattggta tccatatctt gttgaaattg taatgggaaa acaatatatt tcaatctcta 60
tgtagatagt ggggttttgt tttcataata tattctttta gtttactgta tgagttttgc 120
aggactgcat aatagatcac cacaatcata acatcttagg accacagaca tttatgagat 180
catggcttct gtgggttaga agtatgctca tgtcttaact gggtcctctg ctgagtctta 240
tctggctgca atcaaggtgt cagctgggct gaattttcat ttggaatctt gactgggaaa 300
gagtctgctt ccaaggctcat gaagtttgct ggcaaaatgt atgtttttat gacagtatga 360
ctgaaatccc aagctatctc ctgactttta gctgggtaat ctgaggccct aaatggtgcc 420
tacagttcct agaggctggt cacagttctt agccatgtgg atttcctcaa catggctgct 480
tgcttcatca agtcagcaag aatagcctgt catatcagtg tatatcaggc tactcagga 540
taatttccct actgatgagc caaacactaa ctgattttag agcttaacta catctgcaa 600
attcngttca ccagaggcaa gtcatatcca ggaaggaga agtgt 645

```

<210> 438

<211> 485

<212> DNA

<213> Homo sapiens

<400> 438

```

acagaattga gagacaagat tgcttgtaat ggagatgctt ctagctctca gataatacat 60
atttctgatg aaaatgaagg aaaagaaatg tgtgttctgc gaatgactcg agctagacgt 120
tcccaggtag aacagcagca gctcatcact gttgaaaagg ctttggcaat tctttctcag 180
cctacaccct cacttgttgt ggatcatgag cgattaaaaa atcttttgaa gactggtggt 240
aaaaaaagtc aaaactacaa catatttcag ttgaaaatt tgtatgcagt aatcagccaa 300
tgtatttatc ggcacgcgaa ggaccatgat aaaacatcac ttattcagaa aatggagcaa 360
gaggtagaaa acttcagttg ttccagatga tgatgtcatg gtatcgagta ttctttatat 420
tcagttccta ttttaagtcat ttttgtcatg tccgccta at tgatgtagta tgaaaccctg 480
catct 485

```

<210> 439

<211> 533

<212> DNA

<213> Homo sapiens

<400> 439

```

acagcagttt cctcatccct gcagctgtgt ttgaacaggt catttaccat actgtcctcc 60
aggttcaaca gtatggctcc aaatgatgaa atttcattct gatcttctgg ctgaagacta 120
ttctgtttgt gtatgtccac cacagttact ttatcccttc atctgtggat gggcagaatg 180
aaacatatat ggaaatgttc tgtgcaataa aaacagcagt ggtaacacag atgtaggctc 240
tgagtgtctc actggagact gaagtcaca gatatgcaac aaagcctttg tctccctgat 300
gtttttgcct cctgctggtc atgtgctttc acacatcaag agaggacatt taacatttga 360
gccacagtgt catttgctgt tgtctgatgg ttggttggca gagaatttga actggagatg 420
aactttatta tccaggacgc tgagagtata acatgcatga cagagctttt agagcactgt 480
gatgtaacat gtcaagcaga aatagggagc atgtttacag ccattctatg aaa 533

```

<210> 440

<211> 341

<212> DNA

<213> Homo sapiens

<400> 440

```

catggggtag gggggtcggg gattcattga attgtggttg gcaggagcaa gccctgctca 60
cactctcaca ctgcaccca gaattgtcaa agatacagat tgtaaaaatc tacgatccct 120
cagtctcact cacaaaaaat aaaatctcat gtccccaacg aaccagagt cagacgacag 180
ctggagcatt ggcagggaca gtcagaaagg agacaagtga aaacggtcag atggacacag 240

```



```
gcggaggaga aaagacagag ggagagagac catcggaac aatcagaggg gccgagacga 300
tcagaaaagg gtcagcccga gacaggctga gccagagttt c 341
```

```
<210> 441
<211> 572
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> 53, 84, 132, 138, 148
<223> n = A,T,C or G
```

```
<400> 441
aagtttgggg ataatttatt atgcagcaag agataatata caggacttct canagcactt 60
aatatgttaa tataaatctc caanaaaaaa gatatacaat gaaacattcc tcttagttat 120
ctggccaagg anactttntt tttttganaa tattcttcaa aaagctgata taatgatatg 180
gctctggtcc tacaattcca tgtaacttct aaccttgatt ttatctcatg agcaaatcat 240
ttatccttcc agaacctcaa cttttccctt ttacaaagta gaaataaaacc atctgccttt 300
acataaatca ttaatacagc cctggatggg cagattctga gctatttttg gctggggggg 360
gggaaatagc ctgtggaggt cctaaaaaga tctacggggc tcgagatggg tctctgcaag 420
gtagcaggtg ggctcagggc ccatttcagt ctttggtccc caggccattt ccacaaaatg 480
gtgagaaata gtgtcttctt tttagcttgct cataactcaa agatgggggg catggacctg 540
ggcctttcta ggctagggca tgaacctcct cc 572
```

```
<210> 442
<211> 379
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> 34, 67
<223> n = A,T,C or G
```

```
<400> 442
tcccagctgc actgcttaca cgtcttctt cgtnttcacc taccgccagg ctgactcctt 60
cccagntgt gcagctgcc accgcaagg cagcagcagc aatgagcctt cctctgactc 120
gctcagctca cccacgctgc tggccctgtg agggggcagg gaaggggagg cagccggcac 180
ccacaagtgc cactgccga gctgggtgat tacagagagg agaaacacat cttccctaga 240
gggttcctgt agacctagg aggaccttat ctgtgcgtga aacacaccag gctgtggggc 300
tcaaggactt gaaagcatcc atgtgtggac tcaagtcctt acctcttccg gagatgtagc 360
aaaacgcatg gagtgtgta 379
```

```
<210> 443
<211> 511
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> 444
<223> n = A,T,C or G
```

<400> 443

```

acatgcccc aaaggctcgc ttcattgcta cgattctcta cttaaatacca cattcacagc 60
tattgcctca gaccctctgg aggagggggc aggggttagc tggctttgaa tagcatgtag 120
agcacaggca gtgtggccac aaatgtcaca caggtgacca gggtgctata gatgggtgttc 180
ctgttgactt gggcttctag tctctgctcc gtgtctgaca gtgccaaagat catgctcccc 240
tgctccagca agaagctggg catagccccg tctgctgggt ccaccaggcc tgggtgtgct 300
gcagacttta caagctgaac caccacagcc atttggttac aagtcttttc taggccatca 360
agetgctctc gtaagccttc tagacatgaa tggacttgcc tggaaatgact aagetgctct 420
ttcaaggcag ctgaaaggac atcnacatct ctgtctctgg tcgggggact acctgcctgt 480
gaccagagt cctgccctgg cccagcagca t 511

```

<210> 444

<211> 612

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 547

<223> n = A,T,C or G

<400> 444

```

acaggaagaa ttctacagtt aatctatcac agtggtccag caaagcatat gttgaaaact 60
acagttttca atctaacatc taaattttta aaagtagcat ttcagcaaca aacaagctca 120
gagaggctca tggcaaaagt gaaataacag aactattgct cagatgtctg caaagtcaag 180
ctgctgccct cagctccgcc cacttgaagg cttaggcaga cacgtaaggt ggcggtggct 240
ccttggcagc accattcaca gtggcatcat catacggagg tagcagcacc gtagtgtcat 300
tgctggtaac ataaaccagg acatcagagg agttcctacc attgatgtat cggtagcagt 360
tccaaacaca gctaatacaag taacccttaa aagtcaagat aatgctaata aacagaagaa 420
taataaggac caaacaggta ggattcactg acatgacatc atctctgtag ggaaaattag 480
gaggcagttg ccgtatgtat tcctgaatgg agtttggata aataagcaca gtgattgcaa 540
ccaacacctt caggggcaaag tcaaagatct ggtaacagaa gaatgggatg atccaggctg 600
cgcgttgctt gt 612

```

<210> 445

<211> 708

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 643, 676

<223> n = A,T,C or G

<400> 445

```

accatcctgt tccaacagag ccattgccta ttctaaatt gaatctgact ggggtgtgcc 60
ctcctcggaa cacaacagta gaccttaata gtggaaacat cgatgtgcct cccaacatga 120
caagctgggc cagctttcat aatggtgtgg ctgctggcct gaagatagct cctgcctccc 180
agatcgactc agcttggatt gtttacaata agcccaagca tgctgagttg gccaatgagt 240
atgtcggctt tctcatggct ctgggtttga atgggcacct taccaagctg gcgactctca 300
atatccatga ctacttgacc aagggccatg aaatgacaag cattggactg ctacttgggtg 360
tttctgctgc aaaactaggc accatggata tgtctattac tcggcttggt agcattcgca 420
ttcctgctct cttaccccca acgtccacag agttggatgt tcctcacaat gtccaagtgg 480
ctgcagtggg tggcattggc cttgtatatc aagggacagc tcacagacat actgcagaag 540

```

```

tctgtttggc tgagatagga cggcctcctg gtcctgaaat ggaatactgc actgacagag 600
agtcatactc cttagctgct ggcttgccc tgggcatggt ctncctgggg catggcagca 660
atttgatagg tatgtntgat ctcaatgtgc ctgagcagct ctatcagt 708

```

```

<210> 446
<211> 612
<212> DNA
<213> Homo sapiens

```

```

<400> 446
acaagcaacg cgcagcctgg atcatcccat tcttctgtta ccagatcttt gactttgccc 60
tgaacatggt ggttgcaatc actgtgctta tttatccaaa ctccattcag gaatacatac 120
ggcaactgcc tcctaatttt ccctacagag atgatgtcat gtcagtgaat cctacctgtt 180
tggtccttat tattcttctg tttattagca ttatcttgac ttttaagggt tacttgatta 240
gctgtgtttg gaactgctac cgatacatca atggtaggaa ctccctctgat gtcctgggtt 300
atgttaccag caatgacact acggtgctgc taccctcgta tgatgatgcc actgtgaatg 360
gtgctgccaa ggagccaccg ccaccttacg tgtctgccta agccttcaag tgggcggagc 420
tgagggcagc agcttgactt tgcagacatc tgagcaatag ttctgttatt tcaacttttc 480
catgagcctc tctgagcttg tttgttgctg aaatgctact ttttaaaatt tagatgttag 540
attgaaaact gtagttttca acatatgctt tgctggaaca ctgtgataga ttaactgtag 600
aattcttctt gt 612

```

```

<210> 447
<211> 642
<212> DNA
<213> Homo sapiens

```

```

<400> 447
actgaaagaa ttaaagtcag aagtcttccc aaaacaaaaa gaactgcca cagagaaaat 60
cctttctgat acttttcatt gctaaaataa aacaggcggg aaatgtggaa aagaaattca 120
acaaaataat gtagcaccag aagaacaagt cctagatgat tcaagttcaa aaggtaagct 180
ccagcaatgt ggaagaggta aagaccaatg tagacaagct gacgaggaa atcttctttt 240
ttggttttct ggaagtagag ttcaggaaaa gcatgaagcc agtaagccag ctgtgatatg 300
tagaaaaact tcatttgaaa tgtcatcagg ttatggggat aagccctcca taagatagtt 360
gggtctgaga tgtagttttc agagatgaga atgaatgtgc cccaaacaca ggcaaaaagg 420
tagaacgcac taagctgacc agattcatta aacttgctgt gttttgtttt ggagaagtgc 480
attcgctgt taattttatc caacatatac tcttgaatta cggcatgaat aattatcgcc 540
actagcatgt agaagaaaac agtagccaaa tctttgatgc catagtaata aagggacact 600
gattcagtag cttgttcttc tgttgctggg aggggtgacat tg 642

```

```

<210> 448
<211> 394
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 66
<223> n = A,T,C or G

```

```

<400> 448
accagaagac cttagaaaaa ggaggaaagg aggagaggca gataatttgg atgaattcct 60
caaaagnttt gaaaatccag aggttcctag agaggaccag caacagcagc atcagcagc 120
tgatgttatc gatgagccca ttattgaaga gccaaagccg ctccaggagt cagtgatgga 180

```

```

ggccagcaga acaaacatag atgagtcagc tatgcctcca ccaccacctc agggaggttaa 240
gcgaaaagct ggacaaattg acccagagcc tgtgatgcct cctcagcagg tagagcagat 300
ggaaatacca cctgtagagc ttcccccaga agaacctcca aatatctgtc agctaatacc 360
agagttagaa cttctgccag aaaaagagaa ggag                                     394

```

```

<210> 449
<211> 494
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 66
<223> n = A,T,C or G

```

```

<400> 449
acaaaaaaca caaggaatac aaccaatag aaaatagtcc tgggaatgtg gtcagaagca 60
aaggcntgag tgtctttctc aaccgtgcaa aagccgtgtt cttcccgga aaccaggaaa 120
aggatccgct actcaaaaac caagaattta aaggagtctt ttaaatttcg accttgtttc 180
tgaagctcac ttttcagtgc cattgatgtg agatgtgctg gagtggctat taaccttttt 240
ttcctaaaga ttattgttaa atagatattg tggtttgggg aagttgaatt ttttataggt 300
taaagtgtcat tttagagatg gggagaggga ttatactgca ggcagcttca gccatgttgt 360
gaaactgata aaagcaactt agcaaggctt cttttcatta ttttttatgt ttcacttata 420
aagtcttagg taactagtag gatagaaaca ctgtgtcccg agagtaagga gagaagctac 480
tattgattag agcc                                     494

```

```

<210> 450
<211> 547
<212> DNA
<213> Homo sapiens

```

```

<400> 450
actttgggct ccagacttca ctgtccttag gcattgaaac catcacctgg tttgcattct 60
tcattgactga ggttaactta aaacaaaaat ggtaggaaag ctttcctatg cttcgggtaa 120
gagacaaaatt tgcttttgta gaattggtgg ctgagaaagg cagacagggc ctgattaaag 180
aagacatttg tcaccactag ccaccaagtt aagttgtgga acccaaaggt gacggccatg 240
gaaacgtaga tcatcagctc tgctaagtag ttaggggaag aaacatattc aaaccagtct 300
ccaaatggga tctgtgggtt acagtgaatg gccactcctg ctttattttt cctgagattg 360
ccgagaataa catggcactt atactgatgg gcagatgacc agatgaacat catcatccca 420
agaatatgga accaccgtgc ttgcatcaat agatttttcc ctgttatgta ggcattcctg 480
ccatccattg gcacttggct cagcacagtt aggccaacaa ggacataata gacaagtcca 540
aaacagt                                     547

```

```

<210> 451
<211> 384
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 8, 9, 19, 41
<223> n = A,T,C or G

```

```

<400> 451

```

```

actacttntt gggtaaaang ccactggtag agtcatctga ntgtaaacaa tgtccctgca 60
ctgctggaaa aatccactgg ctcccaagaa aagaaaatgg tctgaagcct ctgttggtggc 120
tctcacaact catctttccc taagtcacat agctccacat cactgaggtc aatgtcatcc 180
tccacgggaa gctcgccatc cctgccgtcc caaggctctc tctcaacgat ggtaggggaaa 240
gccccgcctc ctacaggtgc cgtggagcca cgcccaaaag agagctccct gagaaactcg 300
ttgatgcctt gctcactgaa ggagcctttt agcagagcaa atttcatctt gcgtgcattg 360
atggcgcca tggcggggta ccca 384

```

```

<210> 452
<211> 381
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 291, 341, 368
<223> n = A,T,C or G

```

```

<400> 452
actctaaagt tgccactctc acaggggtca gtgataccca ctgaacctgg caggaacagt 60
cctgcagcca gaatctgcaa gcagcgctg tatgcaacgt ttagggccaa aggcgtgtctg 120
gtgggggttg tcatcacagc ataatggcct agtaggtcaa ggatccaggg tgtgaggggc 180
tcaaagccag gaaaacgaat cctcaagtcc ttcagtagtc tgatgagAAC tttactgtg 240
gactgagaag cattttcctc gaaccagcgg gcatgtcgga tggctgctaa ngcactctgc 300
aatactttga tatccaaatg gagttctgga tccagttttc naagattggg tggcactgtt 360
gtaatganaa tcttactgtt a 381

```

```

<210> 453
<211> 455
<212> DNA
<213> Homo sapiens

```

```

<400> 453
actgtgctaa acagcctata gccaaagtttt aaagagttac aggaacaact gctacacatt 60
caaagaacag gcattcactg cagcctcctg atttgacctg atgggaggga caggagaatg 120
agtcactctg ccaccacttt tcttgccctg gatttgtaga ggatttggtt tgctctaatt 180
tgtttttcct atatctgccc tactaaggta cacagtctgg gcactttgaa aatgttaaag 240
tttttaacgt ttgactgaca gaagcagcac ttaaaggctt catgaatcta ttttccaaaa 300
aaagtatgct ttcagtaaaa cattttacca ttttatctaa ctatgactg acatttttgt 360
tcttcctgaa aaggggattt atgctaacac tgtattttta atgtaaaaat atacgtgtag 420
agatatttta acttcctgag tgacttatac ctcaa 455

```

```

<210> 454
<211> 383
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 9
<223> n = A,T,C or G

```

```

<400> 454
acagagcanc tttacaagtt gtcacatttc tttataaatt tttttaagc tacagttaa 60

```

```
tacaaaatga attgcggttt tattacatta ataacctttc acctcagggt tttatgaaga 120
ggaaagggtt ttatgcaaaa gaaagtgcata caattcctaa tcattttaga cacttttagga 180
gggggtgaag ttgtatgata aagcagatat tttaattatt tggtatcttt ttgtattgca 240
agaaatttct tgctagtga tcaagaaaac atccagattg acagtctaaa atggctactg 300
gtatttttagt taattcaaaa atgaaacttt tcagtgtatt actttactaa cattctattt 360
gagaaggctt attggtaaag ttt                                     383
```

```
<210> 455
<211> 383
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> 10
<223> n = A,T,C or G
```

```
<400> 455
actcctttan gacaaggaaa cagggtatcag catgatggta gcagaaacct tatcaccaag 60
gtgcaggagc tgactttctt caaagagttg tggttccggg cagcgggtcat tgccgtgccc 120
attgctggag ggctgatttt agtggttgctt attatggttg ccctgaggat gcttcgaagt 180
gaaaataaga ggctgcagga tcagcggcaa cagatgctct cccgtttgca ctacagcttt 240
cacggacacc attccaaaaa ggggcagggt gcaaagttag acttggaatg catggtgccg 300
gtcagtgggc acgagaactg ctgtctgacc tgtgataaaa tgagacaagc agacctcagc 360
aacgataaga tcctctcgtt tgt                                     383
```

```
<210> 456
<211> 543
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> 64
<223> n = A,T,C or G
```

```
<400> 456
acaaacatth tacaaaaaag aacattacca atatcagtgg cagtaagggc aagctgaaga 60
atangtagac tgagttttccg ggcaatgtct gtcttcaaag acatccaaac tgcgttcagg 120
cagctgaaac aggcttcttt cccagtgaac agcatatgtg gtcagtaata caaacgatgg 180
taaatgaggc tactacatag gccaggttaa caaactcctc ttctcctcgg gtaggccatg 240
atacaagtgg aactcatcaa ataatttaaa cccaaggcga taacaacact atttcccatc 300
taaactcatt taagccttca caatgtcgca atggattcag ttacttgcaa acgatcccgg 360
gttgtcatac agatacttgt tttttacaca taacgtgtgt ccatcccttc cttcactgcc 420
ccagtcagggt ttctgttgtg tggaccgaaa ggggatacat tttagaaatg cttccctcaa 480
gacagaagtg agaaaagaaa gagaccctga ggccaggatc tattaacact ggtgtgtgcg 540
caa                                     543
```

```
<210> 457
<211> 544
<212> DNA
<213> Homo sapiens
```

```
<220>
```

<221> misc_feature
 <222> 17
 <223> n = A,T,C or G

<400> 457
 actggtgcca atattgncat ggtgagctcc tctctaattgt cttccagggc accaatatct 60
 gcccatgtca cattagggac agtgacaaag ccttcccttt tggcagaggg ttggactgag 120
 gatagagcaa caatgaaatc attcagttca atgcacagtc cttgcatctg ctccctctgag 180
 aggggatctt ggtctcttag caaccccagc agcctttgta attcatcctg tgtttcagaa 240
 gtgggctcag ttcccagcct ttctctctgg actcctttag atggcaaadc ttccatttca 300
 ggatttttct tctgctgttc ctgtagcttc attaagactc tattgactgc acacattgct 360
 gcctctcggc acagtgccat gagatcagca ccaacaaagc ctggagttag gtgtgctaag 420
 tgacagaaat caaaagcttg aggaagcctc agttttctgc acaatgtttg aagtattctt 480
 tccctggatg cttcatctgg gatacctag catatttctc ggtcgaacct tcccgcacgt 540
 ctca 544

<210> 458
 <211> 382
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 5, 23
 <223> n = A,T,C or G

<400> 458
 acctntaggc tcaacggcag aancttcacc acaaaagcga aatgggcaca ccacagggag 60
 aaaactgggt gtccctggatg ttgaaaagt tggtcgttgt catgggtgtg tacttcatcc 120
 tatctatcat taactccatg gcacaaagt atgccaaacg aatccagcag cggttgaact 180
 cagaggagaa aactaaataa gtagagaaag ttttaactg cagaaattgg agtggatggg 240
 ttctgcctta aattgggagg actccaagcc gggaaggaaa attccctttt ccaacctgta 300
 tcaattttta caactttttt cctgaaagca gtttagtcca tactttgcac tgacatactt 360
 ttcccttctg tgctaaggta ag 382

<210> 459
 <211> 168
 <212> DNA
 <213> Homo sapiens

<400> 459
 ctctgtactct agccaggcac gaaaccatga agtagcctga tcccttcttag ccatcctggc 60
 cgcccttagcg gtagtaactt tgtgttatga atcacatgaa agcatggaat cttatgaact 120
 taatcccttc attaacagga gaaatgcaaa taccttcata tccctca 168

<210> 460
 <211> 190
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 4
 <223> n = A,T,C or G

<400> 460
 acanctgcta ccagggagcc gagagctgac tatcccagcc tcggctaattg tattctacgc 60
 catggatgga gcttcacacg atttcctcct gcggcagcgg cgaaggtcct ctactgctac 120
 acctggcgtc accagtggcc cgtctgcctc aggaactcct ccgagtgagg gaggaggggg 180
 ctcttttccc 190

<210> 461
 <211> 495
 <212> DNA
 <213> Homo sapiens

<400> 461
 acagacaggc ttctctgcta tcctccaggc agtgtaatatg tcaaggaaaa gggcaacagt 60
 attggatcat tccttagaca ctaatcagct ggggaaagag ttcattggca aaagtgtcct 120
 cccaagaatg gtttacacca agcagagagg acatgtcact gaatggggaa agggaacccc 180
 cgtatccaca gtcactgtaa gcatccagta ggcaggaaga tggctttggg cagtggctgg 240
 atgaaagcag atttgagata ccagctccg gaacgaggtc atcttctaca ggttcttct 300
 tctactgagac aatgaattca gggatgatcat tctctgaggg gctgagaggt gcttcctcga 360
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<211> 674

<212> DNA

<213> Homo sapiens

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<210> 468

<211> 2307

<212> DNA

<213> Homo sapiens

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<211> 650

<212> PRT

<213> Homo sapiens

<220>

<221> VARIANT

<222> 310, 429, 522

<223> Xaa = Any Amino Acid

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65           70           75           80
Glu Asp Glu Glu Tyr Ser Cys Asp Ser Arg Ser Leu Phe Glu Ser Ser
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Ala Lys Ile Gln Val Cys Ile Pro Glu Ser Ile Tyr Gln Lys Val Met
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145           150          155          160
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Cys Glu Thr Val Ser Gln Lys Asp Val Cys Leu Pro Lys Ala Thr His
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Gln Lys Glu Ile Asp Lys Ile Asn Gly Lys Leu Glu Glu Ser Pro Asn
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Gly Met Lys Val Ser Ile Pro Thr Lys Ala Leu Glu Leu Met Asp Met
      340      345      350
Gln Thr Phe Lys Ala Glu Pro Pro Glu Lys Pro Ser Ala Phe Glu Pro
      355      360      365
Ala Ile Glu Met Gln Lys Ser Val Pro Asn Lys Ala Leu Glu Leu Lys
      370      375      380
Asn Glu Gln Thr Leu Arg Ala Asp Glu Ile Leu Pro Ser Glu Ser Lys
385      390      395      400
Gln Lys Asp Tyr Glu Glu Ser Ser Trp Asp Ser Glu Ser Leu Cys Glu
      405      410      415
Thr Val Ser Gln Lys Asp Val Cys Leu Pro Lys Ala Xaa His Gln Lys
      420      425      430
Glu Ile Asp Lys Ile Asn Gly Lys Leu Glu Glu Ser Pro Asp Asn Asp
      435      440      445
Gly Phe Leu Lys Ala Pro Cys Arg Met Lys Val Ser Ile Pro Thr Lys
      450      455      460
Ala Leu Glu Leu Met Asp Met Gln Thr Phe Lys Ala Glu Pro Pro Glu
465      470      475      480
Lys Pro Ser Ala Phe Glu Pro Ala Ile Glu Met Gln Lys Ser Val Pro
      485      490      495
Asn Lys Ala Leu Glu Leu Lys Asn Glu Gln Thr Leu Arg Ala Asp Gln
      500      505      510
Met Phe Pro Ser Glu Ser Lys Gln Lys Xaa Val Glu Glu Asn Ser Trp
      515      520      525
Asp Ser Glu Ser Leu Arg Glu Thr Val Ser Gln Lys Asp Val Cys Val
      530      535      540
Pro Lys Ala Thr His Gln Lys Glu Met Asp Lys Ile Ser Gly Lys Leu
545      550      555      560
Glu Asp Ser Thr Ser Leu Ser Lys Ile Leu Asp Thr Val His Ser Cys
      565      570      575
Glu Arg Ala Arg Glu Leu Gln Lys Asp His Cys Glu Gln Arg Thr Gly
      580      585      590
Lys Met Glu Gln Met Lys Lys Lys Phe Cys Val Leu Lys Lys Lys Leu
      595      600      605
Ser Glu Ala Lys Glu Ile Lys Ser Gln Leu Glu Asn Gln Lys Val Lys
      610      615      620
Trp Glu Gln Glu Leu Cys Ser Val Arg Phe Leu Thr Leu Met Lys Met
625      630      635      640
Lys Ile Ile Ser Tyr Met Lys Ile Ala Cys
      645      650

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<210> 470

<211> 228

<212> PRT

<213> Homo sapiens

<400> 470

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Met Ser Pro Ala Lys Glu Thr Ser Glu Lys Phe Thr Trp Ala Ala Lys
 1          5          10          15
Gly Arg Pro Arg Lys Ile Ala Trp Glu Lys Lys Glu Thr Pro Val Lys
          20          25          30
Thr Gly Cys Val Ala Arg Val Thr Ser Asn Lys Thr Lys Val Leu Glu
          35          40          45
Lys Gly Arg Ser Lys Met Ile Ala Cys Pro Thr Lys Glu Ser Ser Thr
          50          55          60
Lys Ala Ser Ala Asn Asp Gln Arg Phe Pro Ser Glu Ser Lys Gln Glu
65          70          75          80
Glu Asp Glu Glu Tyr Ser Cys Asp Ser Arg Ser Leu Phe Glu Ser Ser
          85          90          95
Ala Lys Ile Gln Val Cys Ile Pro Glu Ser Ile Tyr Gln Lys Val Met
          100          105          110
Glu Ile Asn Arg Glu Val Glu Glu Pro Pro Lys Lys Pro Ser Ala Phe
          115          120          125
Lys Pro Ala Ile Glu Met Gln Asn Ser Val Pro Asn Lys Ala Phe Glu
          130          135          140
Leu Lys Asn Glu Gln Thr Leu Arg Ala Asp Pro Met Phe Pro Pro Glu
145          150          155          160
Ser Lys Gln Lys Asp Tyr Glu Glu Asn Ser Trp Asp Ser Glu Ser Leu
          165          170          175
Cys Glu Thr Val Ser Gln Lys Asp Val Cys Leu Pro Lys Ala Thr His
          180          185          190
Gln Lys Glu Ile Asp Lys Ile Asn Gly Lys Leu Glu Gly Lys Asn Arg
          195          200          205
Phe Leu Phe Lys Asn Gln Leu Thr Glu Tyr Phe Ser Lys Leu Met Arg
          210          215          220
Arg Asp Ile Leu
225

```

<210> 471

<211> 154

<212> PRT

<213> Homo sapiens

<220>

<221> VARIANT

<222> 148

<223> Xaa = Any Amino Acid

<400> 471

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Met Arg Leu His Pro Trp Arg Lys Glu His Leu Thr Gln Leu Lys Ala
 1          5          10          15
Trp Trp Lys Lys His Leu Met Arg Leu His Pro Trp Trp Lys Glu His
          20          25          30
Leu Thr Arg Leu Lys Ala Trp Trp Lys Lys His Leu Met Arg Leu His
          35          40          45
Pro Trp Trp Arg Glu His Leu Thr Lys Phe Asn Val Trp Arg Lys Arg
          50          55          60

```

His Leu Glu Ser Ser Asn Ser Gln Gln Lys Lys His Leu Gly Lys Leu
 65 70 75 80
 Arg Val Leu Gln Lys Lys His Leu Arg Asn Leu Arg Gly Gln Gln Lys
 85 90 95
 Glu Asp Leu Gly Arg Ser His Gly Arg Lys Lys Met Thr Gln Leu Arg
 100 105 110
 Gln Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
 115 120 125
 Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
 130 135 140
 Lys Lys Lys Xaa Lys Lys Lys Lys Lys
 145 150

<210> 472

<211> 466

<212> PRT

<213> Homo sapiens

<220>

<221> VARIANT

<222> 329

<223> Xaa = Any Amino Acid

<400> 472

Met Ser Pro Ala Lys Glu Thr Ser Glu Lys Phe Thr Trp Ala Ala Lys
 1 5 10 15
 Gly Arg Pro Arg Lys Ile Ala Trp Glu Lys Lys Glu Thr Pro Val Lys
 20 25 30
 Thr Gly Cys Val Ala Arg Val Thr Ser Asn Lys Thr Lys Val Leu Glu
 35 40 45
 Lys Gly Arg Ser Lys Met Ile Ala Cys Pro Thr Lys Glu Ser Ser Thr
 50 55 60
 Lys Ala Ser Ala Asn Asp Gln Arg Phe Pro Ser Glu Ser Lys Gln Glu
 65 70 75 80
 Glu Asp Glu Glu Tyr Ser Cys Asp Ser Arg Ser Leu Phe Glu Ser Ser
 85 90 95
 Ala Lys Ile Gln Val Cys Ile Pro Glu Ser Ile Tyr Gln Lys Val Met
 100 105 110
 Glu Ile Asn Arg Glu Val Glu Glu Pro Pro Lys Lys Pro Ser Ala Phe
 115 120 125
 Lys Pro Ala Ile Glu Met Gln Asn Ser Val Pro Asn Lys Ala Phe Glu
 130 135 140
 Leu Lys Asn Glu Gln Thr Leu Arg Ala Asp Pro Met Phe Pro Pro Glu
 145 150 155 160
 Ser Lys Gln Lys Asp Tyr Glu Glu Asn Ser Trp Asp Ser Glu Ser Leu
 165 170 175
 Cys Glu Thr Val Ser Gln Lys Asp Val Cys Leu Pro Lys Ala Thr His
 180 185 190
 Gln Lys Glu Ile Asp Lys Ile Asn Gly Lys Leu Glu Glu Ser Pro Asn
 195 200 205
 Lys Asp Gly Leu Leu Lys Ala Thr Cys Gly Met Lys Val Ser Ile Pro
 210 215 220
 Thr Lys Ala Leu Glu Leu Lys Asp Met Gln Thr Phe Lys Ala Glu Pro


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225          230          235          240
Pro Gly Lys Pro Ser Ala Phe Glu Pro Ala Thr Glu Met Gln Lys Ser
          245          250          255
Val Pro Asn Lys Ala Leu Glu Leu Lys Asn Glu Gln Thr Leu Arg Ala
          260          265          270
Asp Glu Ile Leu Pro Ser Glu Ser Lys Gln Lys Asp Tyr Glu Glu Asn
          275          280          285
Ser Trp Asp Thr Glu Ser Leu Cys Glu Thr Val Ser Gln Lys Asp Val
          290          295          300
Cys Leu Pro Lys Ala Ala His Gln Lys Glu Ile Asp Lys Ile Asn Gly
305          310          315          320
Lys Leu Glu Gly Ser Pro Gly Lys Xaa Gly Leu Leu Lys Ala Asn Cys
          325          330          335
Gly Met Lys Val Ser Ile Pro Thr Lys Ala Leu Glu Leu Met Asp Met
          340          345          350
Gln Thr Phe Lys Ala Glu Pro Pro Glu Lys Pro Ser Ala Phe Glu Pro
          355          360          365
Ala Ile Glu Met Gln Lys Ser Val Pro Asn Lys Ala Leu Glu Leu Lys
          370          375          380
Asn Glu Gln Thr Leu Arg Ala Asp Glu Ile Leu Pro Ser Glu Ser Lys
385          390          395          400
Gln Lys Asp Tyr Glu Glu Ser Ser Trp Asp Ser Glu Ser Leu Cys Glu
          405          410          415
Thr Val Ser Gln Lys Asp Val Cys Leu Pro Lys Ala Ala His Gln Lys
          420          425          430
Glu Ile Asp Lys Ile Asn Gly Lys Leu Glu Gly Lys Asn Arg Phe Leu
          435          440          445
Phe Lys Asn His Leu Thr Lys Tyr Phe Ser Lys Leu Met Arg Lys Asp
          450          455          460
Ile Leu
465

```

```

<210> 473
<211> 445
<212> PRT
<213> Homo sapiens

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<400> 473
Lys Glu Ile Asp Lys Ile Asn Gly Lys Leu Glu Gly Ser Pro Val Lys
 1          5          10          15
Asp Gly Leu Leu Lys Ala Asn Cys Gly Met Lys Val Ser Ile Pro Thr
          20          25          30
Lys Ala Leu Glu Leu Met Asp Met Gln Thr Phe Lys Ala Glu Pro Pro
          35          40          45
Glu Lys Pro Ser Ala Phe Glu Pro Ala Ile Glu Met Gln Lys Ser Val
          50          55          60
Pro Asn Lys Ala Leu Glu Leu Lys Asn Glu Gln Thr Leu Arg Ala Asp
65          70          75          80
Glu Ile Leu Pro Ser Glu Ser Lys Gln Lys Asp Tyr Glu Glu Ser Ser
          85          90          95
Trp Asp Ser Glu Ser Leu Cys Glu Thr Val Ser Gln Lys Asp Val Cys
          100          105          110
Leu Pro Lys Ala Ala His Gln Lys Glu Ile Asp Lys Ile Asn Gly Lys

```

115 120 125
 Leu Glu Glu Ser Pro Asp Asn Asp Gly Phe Leu Lys Ala Pro Cys Arg
 130 135 140
 Met Lys Val Ser Ile Pro Thr Lys Ala Leu Glu Leu Met Asp Met Gln
 145 150 155 160
 Thr Phe Lys Ala Glu Pro Pro Glu Lys Pro Ser Ala Phe Glu Pro Ala
 165 170 175
 Ile Glu Met Gln Lys Ser Val Pro Asn Lys Ala Leu Glu Leu Lys Asn
 180 185 190
 Glu Gln Thr Leu Arg Ala Asp Gln Met Phe Pro Ser Glu Ser Lys Gln
 195 200 205
 Lys Lys Val Glu Glu Asn Ser Trp Asp Ser Glu Ser Leu Arg Glu Thr
 210 215 220
 Val Ser Gln Lys Asp Val Cys Val Pro Lys Ala Thr His Gln Lys Glu
 225 230 235 240
 Met Asp Lys Ile Ser Gly Lys Leu Glu Asp Ser Thr Ser Leu Ser Lys
 245 250 255
 Ile Leu Asp Thr Val His Ser Cys Glu Arg Ala Arg Glu Leu Gln Lys
 260 265 270
 Asp His Cys Glu Gln Arg Thr Gly Lys Met Glu Gln Met Lys Lys Lys
 275 280 285
 Phe Cys Val Leu Lys Lys Lys Leu Ser Glu Ala Lys Glu Ile Lys Ser
 290 295 300
 Gln Leu Glu Asn Gln Lys Val Lys Trp Glu Gln Glu Leu Cys Ser Val
 305 310 315 320
 Arg Leu Thr Leu Asn Gln Glu Glu Glu Lys Arg Arg Asn Ala Asp Ile
 325 330 335
 Leu Asn Glu Lys Ile Arg Glu Glu Leu Gly Arg Ile Glu Glu Gln His
 340 345 350
 Arg Lys Glu Leu Glu Val Lys Gln Leu Glu Gln Ala Leu Arg Ile
 355 360 365
 Gln Asp Ile Glu Leu Lys Ser Val Glu Ser Asn Leu Asn Gln Val Ser
 370 375 380
 His Thr His Glu Asn Glu Asn Tyr Leu Leu His Glu Asn Cys Met Leu
 385 390 395 400
 Lys Lys Glu Ile Ala Met Leu Lys Leu Glu Ile Ala Thr Leu Lys His
 405 410 415
 Gln Tyr Gln Glu Lys Glu Asn Lys Tyr Phe Glu Asp Ile Lys Ile Leu
 420 425 430
 Lys Glu Lys Asn Ala Glu Leu Gln Met Thr Pro Arg Ala
 435 440 445

<210> 474
 <211> 3865
 <212> DNA
 <213> Homo sapiens

<400> 474
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 ctagtgggcc ctgtgggcat ttattagtaa agttttaatg acaaaagctt tgagtcaaca 120
 caccctgtggg taattaacct ggcatcccc accctggaga gccatcctgc ccatgggtga 180
 tcaaagaagg aacatctgca ggaacacctg atgaggctgc acccttggcg gaaagaacac 240
 ctgacacagc tgaaagcttg gtggaaaaaa cacctgatga ggctgcaccc ttggtggaaa 300

gaacacctga	cacggctgaa	agcttgggtgg	aaaaaacacc	tgatgaggct	gcaccccttgg	360
tggagggaac	atctgacaaa	attcaatgtt	tggagaaagc	gacatctgga	aagttcgaac	420
agtcagcaga	agaaacacct	agggaaatta	cgagtcctgc	aaaagaaaca	tctgagaaat	480
ttacgtggcc	agcaaaagga	agacctagga	agatcgcatg	ggagaaaaaa	gaagacacac	540
ctagggaaat	tatgagtccc	gcaaaagaaa	catctgagaa	atttacgtgg	gcagcaaaag	600
gaagacctag	gaagatcgca	tgggagaaaa	aagaaacacc	tgtaaagact	ggatgcgtgg	660
caagagtaac	atctaataaa	actaaagttt	tggaaaaagg	aagatctaag	atgattgcat	720
gtcctacaaa	agaatcatct	acaaaagcaa	gtgccaatga	tcagaggttc	ccatcagaat	780
ccaaacaaga	ggaagatgaa	gaatattctt	gtgattctcg	gagtctcttt	gagagtctctg	840
caaagattca	agtgtgtata	cctgagtcta	tatatcaaaa	agtaatggag	ataaatagag	900
aagtagaaga	gcctcctaag	aagccatctg	ccttcaagcc	tgccattgaa	atgcaaaaact	960
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tcccaccaga	atccaaacaa	aaggactatg	aagaaaattc	ttgggattct	gagagtctct	1080
gtgagactgt	ttcacagaag	gatgtgtgtt	tacccaaggc	tacacatcaa	aaagaaatct	1140
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gcggaatgaa	agtttctatt	ccaactaaag	ccttagaatt	gaaggacatg	caaaactttca	1260
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catcagaatc	caaacaaaag	gactatgaag	aaagttcttg	ggattctgag	agtctctgtg	1440
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taaatggaaa	attagaagag	tctcctgata	atgatggttt	tctgaaggct	ccctgcagaa	1920
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ctctcagaat	acaagatata	gaattgaaga	gtgtagaaag	taatttgaat	caggtttctc	2640
acactcatga	aaatgaaaat	tatctcttac	atgaaaattg	catgttgaaa	aaggaaaattg	2700
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ggcttcaaca	gcaattagtt	catgcacata	agaaagctga	caacaaaagc	aagataacaa	3420
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tcctgaagcc tacagacata aaataacagt gtgaagaatt acttggtcac gaattgcata 3780
aagctgcaca ggattcccat ctaccctgat gatgcagcag acatcattca atccaaccag 3840
aatctcgtc tgtcactcag gctgg                                     3865

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<210> 475
 <211> 1002
 <212> PRT
 <213> Homo sapiens

<220>
 <221> VARIANT
 <222> 310, 429, 522
 <223> Xaa = Any Amino Acid

<400> 475

Met	Ser	Pro	Ala	Lys	Glu	Thr	Ser	Glu	Lys	Phe	Thr	Trp	Ala	Ala	Lys
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Gly	Arg	Pro	Arg	Lys	Ile	Ala	Trp	Glu	Lys	Lys	Glu	Thr	Pro	Val	Lys
			20					25					30		
Thr	Gly	Cys	Val	Ala	Arg	Val	Thr	Ser	Asn	Lys	Thr	Lys	Val	Leu	Glu
		35					40					45			
Lys	Gly	Arg	Ser	Lys	Met	Ile	Ala	Cys	Pro	Thr	Lys	Glu	Ser	Ser	Thr
	50				55						60				
Lys	Ala	Ser	Ala	Asn	Asp	Gln	Arg	Phe	Pro	Ser	Glu	Ser	Lys	Gln	Glu
65				70					75					80	
Glu	Asp	Glu	Glu	Tyr	Ser	Cys	Asp	Ser	Arg	Ser	Leu	Phe	Glu	Ser	Ser
			85					90					95		
Ala	Lys	Ile	Gln	Val	Cys	Ile	Pro	Glu	Ser	Ile	Tyr	Gln	Lys	Val	Met
		100						105					110		
Glu	Ile	Asn	Arg	Glu	Val	Glu	Glu	Pro	Pro	Lys	Lys	Pro	Ser	Ala	Phe
	115					120						125			
Lys	Pro	Ala	Ile	Glu	Met	Gln	Asn	Ser	Val	Pro	Asn	Lys	Ala	Phe	Glu
	130				135						140				
Leu	Lys	Asn	Glu	Gln	Thr	Leu	Arg	Ala	Asp	Pro	Met	Phe	Pro	Pro	Glu
145				150					155					160	
Ser	Lys	Gln	Lys	Asp	Tyr	Glu	Glu	Asn	Ser	Trp	Asp	Ser	Glu	Ser	Leu
			165					170					175		
Cys	Glu	Thr	Val	Ser	Gln	Lys	Asp	Val	Cys	Leu	Pro	Lys	Ala	Thr	His
	180					185						190			
Gln	Lys	Glu	Ile	Asp	Lys	Ile	Asn	Gly	Lys	Leu	Glu	Glu	Ser	Pro	Asn
	195					200					205				
Lys	Asp	Gly	Leu	Leu	Lys	Ala	Thr	Cys	Gly	Met	Lys	Val	Ser	Ile	Pro
	210				215						220				
Thr	Lys	Ala	Leu	Glu	Leu	Lys	Asp	Met	Gln	Thr	Phe	Lys	Ala	Glu	Pro
225				230					235					240	
Pro	Gly	Lys	Pro	Ser	Ala	Phe	Glu	Pro	Ala	Thr	Glu	Met	Gln	Lys	Ser
			245					250					255		
Val	Pro	Asn	Lys	Ala	Leu	Glu	Leu	Lys	Asn	Glu	Gln	Thr	Leu	Arg	Ala
		260				265						270			
Asp	Glu	Ile	Leu	Pro	Ser	Glu	Ser	Lys	Gln	Lys	Asp	Tyr	Glu	Glu	Ser
	275					280						285			

Ser Trp Asp Ser Glu Ser Leu Cys Glu Thr Val Ser Gln Lys Asp Val
 290 295 300
 Cys Leu Pro Lys Ala Xaa His Gln Lys Glu Ile Asp Lys Ile Asn Gly
 305 310 315 320
 Lys Leu Glu Gly Ser Pro Val Lys Asp Gly Leu Leu Lys Ala Asn Cys
 325 330 335
 Gly Met Lys Val Ser Ile Pro Thr Lys Ala Leu Glu Leu Met Asp Met
 340 345 350
 Gln Thr Phe Lys Ala Glu Pro Pro Glu Lys Pro Ser Ala Phe Glu Pro
 355 360 365
 Ala Ile Glu Met Gln Lys Ser Val Pro Asn Lys Ala Leu Glu Leu Lys
 370 375 380
 Asn Glu Gln Thr Leu Arg Ala Asp Glu Ile Leu Pro Ser Glu Ser Lys
 385 390 395 400
 Gln Lys Asp Tyr Glu Glu Ser Ser Trp Asp Ser Glu Ser Leu Cys Glu
 405 410 415
 Thr Val Ser Gln Lys Asp Val Cys Leu Pro Lys Ala Xaa His Gln Lys
 420 425 430
 Glu Ile Asp Lys Ile Asn Gly Lys Leu Glu Glu Ser Pro Asp Asn Asp
 435 440 445
 Gly Phe Leu Lys Ala Pro Cys Arg Met Lys Val Ser Ile Pro Thr Lys
 450 455 460
 Ala Leu Glu Leu Met Asp Met Gln Thr Phe Lys Ala Glu Pro Pro Glu
 465 470 475 480
 Lys Pro Ser Ala Phe Glu Pro Ala Ile Glu Met Gln Lys Ser Val Pro
 485 490 495
 Asn Lys Ala Leu Glu Leu Lys Asn Glu Gln Thr Leu Arg Ala Asp Gln
 500 505 510
 Met Phe Pro Ser Glu Ser Lys Gln Lys Xaa Val Glu Glu Asn Ser Trp
 515 520 525
 Asp Ser Glu Ser Leu Arg Glu Thr Val Ser Gln Lys Asp Val Cys Val
 530 535 540
 Pro Lys Ala Thr His Gln Lys Glu Met Asp Lys Ile Ser Gly Lys Leu
 545 550 555 560
 Glu Asp Ser Thr Ser Leu Ser Lys Ile Leu Asp Thr Val His Ser Cys
 565 570 575
 Glu Arg Ala Arg Glu Leu Gln Lys Asp His Cys Glu Gln Arg Thr Gly
 580 585 590
 Lys Met Glu Gln Met Lys Lys Lys Phe Cys Val Leu Lys Lys Lys Leu
 595 600 605
 Ser Glu Ala Lys Glu Ile Lys Ser Gln Leu Glu Asn Gln Lys Val Lys
 610 615 620
 Trp Glu Gln Glu Leu Cys Ser Val Arg Leu Thr Leu Asn Gln Glu Glu
 625 630 635 640
 Glu Lys Arg Arg Asn Ala Asp Ile Leu Asn Glu Lys Ile Arg Glu Glu
 645 650 655
 Leu Gly Arg Ile Glu Glu Gln His Arg Lys Glu Leu Glu Val Lys Gln
 660 665 670
 Gln Leu Glu Gln Ala Leu Arg Ile Gln Asp Ile Glu Leu Lys Ser Val
 675 680 685
 Glu Ser Asn Leu Asn Gln Val Ser His Thr His Glu Asn Glu Asn Tyr
 690 695 700
 Leu Leu His Glu Asn Cys Met Leu Lys Lys Glu Ile Ala Met Leu Lys
 705 710 715 720

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<210> 476
<211> 356
<212> DNA
<213> Homo sapiens
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<210>	477
<211>	1876
<212>	DNA

<213> Homo sapiens

<400> 477

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taccagaacc gcgagtgttg ccagagcaac ctggagcccc tgtttgaggg ctacatcgag 480
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tgccagaact ccaagctgga ggccgcggtg gctcagctctg agcagcaggg tgaggcagcc 1080
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atcgagatcg ccacctacag gcgcctgctg gagggcgagg agcagaggct atgtgaaggc 1260
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ggaagggggc tcaggagcag gaagggccag gaccagaacc ttgcccacgg caactgcctt 1800
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aaaaaaaaa aaaaaa 1876

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<210> 478

<211> 505

<212> PRT

<213> Homo sapiens

<400> 478

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Met Thr Cys Gly Ser Gly Phe Gly Gly Arg Ala Phe Ser Cys Ile Ser
 1           5           10           15
Ala Cys Gly Pro Arg Pro Gly Arg Cys Cys Ile Thr Ala Ala Pro Tyr
          20           25           30
Arg Gly Ile Ser Cys Tyr Arg Gly Leu Thr Gly Gly Phe Gly Ser His
          35           40           45
Ser Val Cys Gly Gly Phe Arg Ala Gly Ser Cys Gly Arg Ser Phe Gly
          50           55           60
Tyr Arg Ser Gly Gly Val Cys Gly Pro Ser Pro Pro Cys Ile Thr Thr
          65           70           75           80
Val Ser Val Asn Glu Ser Leu Leu Thr Pro Leu Asn Leu Glu Ile Asp
          85           90           95

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Pro Asn Ala Gln Cys Val Lys Gln Glu Glu Lys Glu Gln Ile Lys Ser
 100 105 110
 Leu Asn Ser Arg Phe Ala Ala Phe Ile Asp Lys Val Arg Phe Leu Glu
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 Gln Gln Asn Lys Leu Leu Glu Thr Lys Leu Gln Phe Tyr Gln Asn Arg
 130 135 140
 Glu Cys Cys Gln Ser Asn Leu Glu Pro Leu Phe Glu Gly Tyr Ile Glu
 145 150 155 160
 Thr Leu Arg Arg Glu Ala Glu Cys Val Glu Ala Asp Ser Gly Arg Leu
 165 170 175
 Ala Ser Glu Leu Asn His Val Gln Glu Val Leu Glu Gly Tyr Lys Lys
 180 185 190
 Lys Tyr Glu Glu Glu Val Ser Leu Arg Ala Thr Ala Glu Asn Glu Phe
 195 200 205
 Val Ala Leu Lys Lys Asp Val Asp Cys Ala Tyr Leu Arg Lys Ser Asp
 210 215 220
 Leu Glu Ala Asn Val Glu Ala Leu Ile Gln Glu Ile Asp Phe Leu Arg
 225 230 235 240
 Arg Leu Tyr Glu Glu Glu Ile Arg Ile Leu Gln Ser His Ile Ser Asp
 245 250 255
 Thr Ser Val Val Val Lys Leu Asp Asn Ser Arg Asp Leu Asn Met Asp
 260 265 270
 Cys Ile Ile Ala Glu Ile Lys Ala Gln Tyr Asp Asp Ile Val Thr Arg
 275 280 285
 Ser Arg Ala Glu Ala Glu Ser Trp Tyr Arg Ser Lys Cys Glu Glu Met
 290 295 300
 Lys Ala Thr Val Ile Arg His Gly Glu Thr Leu Arg Arg Thr Lys Glu
 305 310 315 320
 Glu Ile Asn Glu Leu Asn Arg Met Ile Gln Arg Leu Thr Ala Glu Val
 325 330 335
 Glu Asn Ala Lys Cys Gln Asn Ser Lys Leu Glu Ala Ala Val Ala Gln
 340 345 350
 Ser Glu Gln Gln Gly Glu Ala Ala Leu Ser Asp Ala Arg Cys Lys Leu
 355 360 365
 Ala Glu Leu Glu Gly Ala Leu Gln Lys Ala Lys Gln Asp Met Ala Cys
 370 375 380
 Leu Ile Arg Glu Tyr Gln Glu Val Met Asn Ser Lys Leu Gly Leu Asp
 385 390 395 400
 Ile Glu Ile Ala Thr Tyr Arg Arg Leu Leu Glu Gly Glu Glu Gln Arg
 405 410 415
 Leu Cys Glu Gly Ile Gly Ala Val Asn Val Cys Val Ser Ser Ser Arg
 420 425 430
 Gly Gly Val Val Cys Gly Asp Leu Cys Val Ser Gly Ser Arg Pro Val
 435 440 445
 Thr Gly Ser Val Cys Ser Ala Pro Cys Asn Gly Asn Val Ala Val Ser
 450 455 460
 Thr Gly Leu Cys Ala Pro Cys Gly Gln Leu Asn Thr Thr Cys Gly Gly
 465 470 475 480
 Gly Ser Cys Gly Val Gly Ser Cys Gly Ile Ser Ser Leu Gly Val Gly
 485 490 495
 Ser Cys Gly Ser Ser Cys Arg Lys Cys
 500 505

<210> 479
 <211> 221
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 22
 <223> n = A,T,C or G

<400> 479
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 tccgatcaaa agaatcatca tctttacctt gacttttcag ggaattactg aactttcttc 120
 tcagaagata gggcacagcc attgccttgg cctcacttga aggggtctgca tttgggtcct 180
 ctggtctctt gccaaagttc ccagccactc gagggagaaa t 221

<210> 480
 <211> 36
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer

<400> 480
 cggcgaattc accatgggaa caagagctct gcagtg 36

<210> 481
 <211> 62
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer

<400> 481
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 ca 62

<210> 482
 <211> 972
 <212> DNA
 <213> Homo sapiens

<400> 482
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 ctgaaacacc aataccagga aaaggaaaat aaatactttg aggacattaa gattttaaaa 180
 gaaaagaatg ctgaacttca gatgacccta aaactgaaag aggaatcatt aactaaaagg 240
 gcatctcaat atagtgggca gcttaaagtt ctgatagctg agaacacaat gctcacttct 300
 aaattgaagg aaaaacaaga caaagaaata ctagaggcag aaattgaatc acaccatcct 360
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 cctgctttcc acattgcagg agatgcttgt ttgcaaagaa aaatgaatgt tgatgtgagt 480
 agtacgatat ataacaatga ggtgctccat caaccacttt ctgaagctca aaggaaatcc 540

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aaaagcctaa aaattaatct caattatgcc ggagatgctc taagagaaaa tacattgggtt 600
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atgtatcaaa acgaacaaga taatgtgaac aaacacactg aacagcagga gtctctagat 720
cagaaattat ttcaactaca aagcaaaaat atgtggcttc aacagcaatt agttcatgca 780
cataagaaag ctgacaacaa aagcaagata acaattgata ttcattttct tgagaggaaa 840
atgcaacatc atctcctaaa agagaaaaat gaggagatat ttaattacaa taaccattta 900
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<210> 483

<211> 323

<212> PRT

<213> Homo sapiens

<400> 483

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          20           25           30
Met Leu Lys Leu Glu Ile Ala Thr Leu Lys His Gln Tyr Gln Glu Lys
          35           40           45
Glu Asn Lys Tyr Phe Glu Asp Ile Lys Ile Leu Lys Glu Lys Asn Ala
          50           55           60
Glu Leu Gln Met Thr Leu Lys Leu Lys Glu Glu Ser Leu Thr Lys Arg
65           70           75           80
Ala Ser Gln Tyr Ser Gly Gln Leu Lys Val Leu Ile Ala Glu Asn Thr
          85           90           95
Met Leu Thr Ser Lys Leu Lys Glu Lys Gln Asp Lys Glu Ile Leu Glu
          100          105          110
Ala Glu Ile Glu Ser His His Pro Arg Leu Ala Ser Ala Val Gln Asp
          115          120          125
His Asp Gln Ile Val Thr Ser Arg Lys Ser Gln Glu Pro Ala Phe His
          130          135          140
Ile Ala Gly Asp Ala Cys Leu Gln Arg Lys Met Asn Val Asp Val Ser
145          150          155          160
Ser Thr Ile Tyr Asn Asn Glu Val Leu His Gln Pro Leu Ser Glu Ala
          165          170          175
Gln Arg Lys Ser Lys Ser Leu Lys Ile Asn Leu Asn Tyr Ala Gly Asp
          180          185          190
Ala Leu Arg Glu Asn Thr Leu Val Ser Glu His Ala Gln Arg Asp Gln
          195          200          205
Arg Glu Thr Gln Cys Gln Met Lys Glu Ala Glu His Met Tyr Gln Asn
          210          215          220
Glu Gln Asp Asn Val Asn Lys His Thr Glu Gln Glu Ser Leu Asp
225          230          235          240
Gln Lys Leu Phe Gln Leu Gln Ser Lys Asn Met Trp Leu Gln Gln Gln
          245          250          255
Leu Val His Ala His Lys Lys Ala Asp Asn Lys Ser Lys Ile Thr Ile
          260          265          270
Asp Ile His Phe Leu Glu Arg Lys Met Gln His His Leu Leu Lys Glu
          275          280          285
Lys Asn Glu Glu Ile Phe Asn Tyr Asn Asn His Leu Lys Asn Arg Ile
          290          295          300
Tyr Gln Tyr Glu Lys Glu Lys Ala Glu Thr Glu Val Ile His His His

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305
His His His

310

315

320

<210> 484
<211> 1518
<212> DNA
<213> Homo sapiens

<400> 484
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ctcaccgggg gcttcggcag ccacagcgtg tgcggaggct ttctgggcccgtg ctctctgcgga 180
cgcagcttcg gctaccgctc cggggggcgtg tgcggggccc gtcccccatg catcaccacc 240
gtgtcgggtca acgagagcct cctcacgccc ctcaacctgg agatcgacc caacgcgcag 300
tgcgtgaagc aggaggagaa ggagcagatc aagtcacctca acagcagggt cgcggccttc 360
atcgacaagg tgcgcttcct ggagcagcag aacaaaactgc tggagacaaa gctgcagttc 420
taccagaacc gcgagtgttg ccagagcaac ctggagcccc tgtttgaggg ctacatcgag 480
actctgcggc gggaggccga gtgcgtggag gccgacagcg ggaggctggc ctacagagctt 540
aaccacgtgc aggaggtgct ggagggctac aagaagaagt atgaggagga ggtttctctg 600
agagcaacag ctgagaacga gtttgtggct ctgaagaagg atgtggactg cgcctacctc 660
cgcaagtcag acctggaggc caacgtggag gccctgatcc aggagatcga ctctctgagg 720
cggctgtatg aggaggagat ccgcattctc cagtcgcaca tctcagacac ctccgtgggt 780
gtcaagctgg acaacagccg ggacctgaac atggactgca tcattgccga gattaaggca 840
cagtatgacg acattgtcac ccgcagcccg gccgaggccg agtcctggta ccgcagcaag 900
tgtgaggaga tgaaggccac ggtgatcagg cacggggaga ccctgcgccg caccaaggag 960
gagatcaatg agctgaaccg catgatccaa aggtgacgg ccgagggtgga gaatgccaag 1020
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agctgccgga aatgttag 1518

<210> 485
<211> 505
<212> PRT
<213> Homo sapiens

<400> 485
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20 25 30
Arg Gly Ile Ser Cys Tyr Arg Gly Leu Thr Gly Gly Phe Gly Ser His
35 40 45
Ser Val Cys Gly Gly Phe Arg Ala Gly Ser Cys Gly Arg Ser Phe Gly
50 55 60
Tyr Arg Ser Gly Gly Val Cys Gly Pro Ser Pro Pro Cys Ile Thr Thr
65 70 75 80

Val Ser Val Asn Glu Ser Leu Leu Thr Pro Leu Asn Leu Glu Ile Asp
 85 90 95
 Pro Asn Ala Gln Cys Val Lys Gln Glu Glu Lys Glu Gln Ile Lys Ser
 100 105 110
 Leu Asn Ser Arg Phe Ala Ala Phe Ile Asp Lys Val Arg Phe Leu Glu
 115 120 125
 Gln Gln Asn Lys Leu Leu Glu Thr Lys Leu Gln Phe Tyr Gln Asn Arg
 130 135 140
 Glu Cys Cys Gln Ser Asn Leu Glu Pro Leu Phe Glu Gly Tyr Ile Glu
 145 150 155 160
 Thr Leu Arg Arg Glu Ala Glu Cys Val Glu Ala Asp Ser Gly Arg Leu
 165 170 175
 Ala Ser Glu Leu Asn His Val Gln Glu Val Leu Glu Gly Tyr Lys Lys
 180 185 190
 Lys Tyr Glu Glu Glu Val Ser Leu Arg Ala Thr Ala Glu Asn Glu Phe
 195 200 205
 Val Ala Leu Lys Lys Asp Val Asp Cys Ala Tyr Leu Arg Lys Ser Asp
 210 215 220
 Leu Glu Ala Asn Val Glu Ala Leu Ile Gln Glu Ile Asp Phe Leu Arg
 225 230 235 240
 Arg Leu Tyr Glu Glu Glu Ile Arg Ile Leu Gln Ser His Ile Ser Asp
 245 250 255
 Thr Ser Val Val Val Lys Leu Asp Asn Ser Arg Asp Leu Asn Met Asp
 260 265 270
 Cys Ile Ile Ala Glu Ile Lys Ala Gln Tyr Asp Asp Ile Val Thr Arg
 275 280 285
 Ser Arg Ala Glu Ala Glu Ser Trp Tyr Arg Ser Lys Cys Glu Glu Met
 290 295 300
 Lys Ala Thr Val Ile Arg His Gly Glu Thr Leu Arg Arg Thr Lys Glu
 305 310 315 320
 Glu Ile Asn Glu Leu Asn Arg Met Ile Gln Arg Leu Thr Ala Glu Val
 325 330 335
 Glu Asn Ala Lys Cys Gln Asn Ser Lys Leu Glu Ala Ala Val Ala Gln
 340 345 350
 Ser Glu Gln Gln Gly Glu Ala Ala Leu Ser Asp Ala Arg Cys Lys Leu
 355 360 365
 Ala Glu Leu Glu Gly Ala Leu Gln Lys Ala Lys Gln Asp Met Ala Cys
 370 375 380
 Leu Ile Arg Glu Tyr Gln Glu Val Met Asn Ser Lys Leu Gly Leu Asp
 385 390 395 400
 Ile Glu Ile Ala Thr Tyr Arg Arg Leu Leu Glu Gly Glu Glu Gln Arg
 405 410 415
 Leu Cys Glu Gly Ile Gly Ala Val Asn Val Cys Val Ser Ser Ser Arg
 420 425 430
 Gly Gly Val Val Cys Gly Asp Leu Cys Val Ser Gly Ser Arg Pro Val
 435 440 445
 Thr Gly Ser Val Cys Ser Ala Pro Cys Asn Gly Asn Val Ala Val Ser
 450 455 460
 Thr Gly Leu Cys Ala Pro Cys Gly Gln Leu Asn Thr Thr Cys Gly Gly
 465 470 475 480
 Gly Ser Cys Gly Val Gly Ser Cys Gly Ile Ser Ser Leu Gly Val Gly
 485 490 495
 Ser Cys Gly Ser Ser Cys Arg Lys Cys
 500 505

<210> 486
 <211> 827
 <212> DNA
 <213> Homo sapiens

<400> 486
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 gcagccgggc cgaggccgag tcctggtacc gcagcaagtg tgaggagatg aaggccacgg 180
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 ccgcggtggc ccagtctgag cagcagggtg aggcagccct cagtgatgcc cgctgcaagc 360
 tggccgagct ggaggcgcc ctgcagaagg ccaagcagga catggcctgc ctgatcaggg 420
 agtaccagga ggtgatgaac tccaagctgg gcctggacat cgagatcgcc acctacaggc 480
 gcctgctgga gggcgaggag cagaggctat gtgaaggcat tggggctgtg aatgtctgtg 540
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 gtggtatcag ctccctgggt gtggggtctt gcggcagcag ctgccggaaa tgttaggcac 780
 cccaactcaa gtcccaggcc ccaggcatct ttcttgcctt gccttgc 827

<210> 487
 <211> 235
 <212> PRT
 <213> Homo sapiens

<400> 487
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 Thr Arg Ser Arg Ala Glu Ala Glu Ser Trp Tyr Arg Ser Lys Cys Glu
 20 25 30
 Glu Met Lys Ala Thr Val Ile Arg His Gly Glu Thr Leu Arg Arg Thr
 35 40 45
 Lys Glu Glu Ile Asn Glu Leu Asn Arg Met Ile Gln Arg Leu Thr Ala
 50 55 60
 Glu Val Glu Asn Ala Lys Cys Gln Asn Ser Lys Leu Glu Ala Ala Val
 65 70 75 80
 Ala Gln Ser Glu Gln Gln Gly Glu Ala Ala Leu Ser Asp Ala Arg Cys
 85 90 95
 Lys Leu Ala Glu Leu Glu Gly Ala Leu Gln Lys Ala Lys Gln Asp Met
 100 105 110
 Ala Cys Leu Ile Arg Glu Tyr Gln Glu Val Met Asn Ser Lys Leu Gly
 115 120 125
 Leu Asp Ile Glu Ile Ala Thr Tyr Arg Arg Leu Leu Glu Gly Glu Glu
 130 135 140
 Gln Arg Leu Cys Glu Gly Ile Gly Ala Val Asn Val Cys Val Ser Ser
 145 150 155 160
 Ser Arg Gly Gly Val Val Cys Gly Asp Leu Cys Val Ser Gly Ser Arg
 165 170 175
 Pro Val Thr Gly Ser Val Cys Ser Ala Pro Cys Asn Gly Asn Val Ala
 180 185 190
 Val Ser Thr Gly Leu Cys Ala Pro Cys Gly Gln Leu Asn Thr Thr Cys

	195		200		205
Gly	Gly	Gly	Ser	Cys	Gly
	210		215		220
Val	Gly	Ser	Cys	Gly	Ser
225		230		235	

<210> 488
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 488
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<210> 489
 <211> 27
 <212> DNA
 <213> Homo sapiens

<400> 489
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27

<210> 490
 <211> 3288
 <212> DNA
 <213> Homo sapiens

<400> 490
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 gaatacaaaag aacttcttca agagttcata gacgacaatg ccactacaaa tgccatagat 180
 gaattgaagg aatgttttct taaccaaacg gatgaaactc tgagcaatgt tgagggtgtt 240
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<210> 491

<211> 2232

<212> DNA

<213> Homo sapiens

<400> 491

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gaacaaacat tgagagcaga tccgatgttc ccaccagaat ccaaacaaaa ggactatgaa 780
gaaaattctt gggattctga gagtctctgt gagactgttt cacagaagga tgtgtgttta 840
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ctgtcagaag caaaagaaat aaaatcacag ttagagaacc aaaaagttaa atgggaacaa 2160
gagctctgca gtgtgaggtt tctcacactc atgaaaatga aaattatctc ttacatgaaa 2220
attgcatgtt ga 2232

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<210> 492
<211> 1233
<212> DNA
<213> Homo sapiens

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<400> 492
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gaatacaaa aacttcttca agagttcata gacgacaatg ccactacaaa tgccatagat 180
gaattgaagg aatgttttct taaccaaagc gatgaaactc tgagcaatgt tgagggtgtt 240
atgcaattaa tatatgacag cagtctttgt gatttattta tgggaacaag agctctgcag 300
tgtgagggtt ctcacactca tgaaaatgaa aattatctct tacatgaaaa ttgcatgttg 360
aaaaaggaaa ttgccatgct aaaactggaa atagccacac tgaacacca ataccaggaa 420
aaggaaaata aatactttga ggacattaag attttaaaag aaaagaatgc tgaacttcag 480
atgaccctaa aactgaaaga ggaatcatta actaaaagg catctcaata tagtgggcag 540
cttaaagttc tgatagctga gaacacaatg ctcaattcta aattgaagga aaaacaagac 600
aaagaaatac tagaggcaga aattgaatca caccatccta gactggcttc tgctgtacaa 660
gaccatgatc aaattgtgac atcaagaaaa agtcaagaac ctgctttcca cattgcagga 720
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gaaaaagaga aagcagaaac agaagttata taa 1233

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<210> 493
<211> 1095

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<212> PRT
 <213> Homo sapiens

<220>
 <221> VARIANT
 <222> 403, 522, 615
 <223> Xaa = Any Amino Acid

<400> 493

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Met Lys Leu Leu Met Val Leu Met Leu Ala Ala Leu Ser Gln His Cys
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 20          25          30
Ile Asn Pro Gln Val Ser Lys Thr Glu Tyr Lys Glu Leu Leu Gln Glu
 35          40          45
Phe Ile Asp Asp Asn Ala Thr Thr Asn Ala Ile Asp Glu Leu Lys Glu
 50          55          60
Cys Phe Leu Asn Gln Thr Asp Glu Thr Leu Ser Asn Val Glu Val Phe
 65          70          75          80
Met Gln Leu Ile Tyr Asp Ser Ser Leu Cys Asp Leu Phe Met Ser Pro
 85          90          95
Ala Lys Glu Thr Ser Glu Lys Phe Thr Trp Ala Ala Lys Gly Arg Pro
100          105          110
Arg Lys Ile Ala Trp Glu Lys Lys Glu Thr Pro Val Lys Thr Gly Cys
115          120          125
Val Ala Arg Val Thr Ser Asn Lys Thr Lys Val Leu Glu Lys Gly Arg
130          135          140
Ser Lys Met Ile Ala Cys Pro Thr Lys Glu Ser Ser Thr Lys Ala Ser
145          150          155          160
Ala Asn Asp Gln Arg Phe Pro Ser Glu Ser Lys Gln Glu Glu Asp Glu
165          170          175
Glu Tyr Ser Cys Asp Ser Arg Ser Leu Phe Glu Ser Ser Ala Lys Ile
180          185          190
Gln Val Cys Ile Pro Glu Ser Ile Tyr Gln Lys Val Met Glu Ile Asn
195          200          205
Arg Glu Val Glu Glu Pro Pro Lys Lys Pro Ser Ala Phe Lys Pro Ala
210          215          220
Ile Glu Met Gln Asn Ser Val Pro Asn Lys Ala Phe Glu Leu Lys Asn
225          230          235          240
Glu Gln Thr Leu Arg Ala Asp Pro Met Phe Pro Pro Glu Ser Lys Gln
245          250          255
Lys Asp Tyr Glu Glu Asn Ser Trp Asp Ser Glu Ser Leu Cys Glu Thr
260          265          270
Val Ser Gln Lys Asp Val Cys Leu Pro Lys Ala Thr His Gln Lys Glu
275          280          285
Ile Asp Lys Ile Asn Gly Lys Leu Glu Glu Ser Pro Asn Lys Asp Gly
290          295          300
Leu Leu Lys Ala Thr Cys Gly Met Lys Val Ser Ile Pro Thr Lys Ala
305          310          315          320
Leu Glu Leu Lys Asp Met Gln Thr Phe Lys Ala Glu Pro Pro Gly Lys
325          330          335
Pro Ser Ala Phe Glu Pro Ala Thr Glu Met Gln Lys Ser Val Pro Asn
340          345          350
Lys Ala Leu Glu Leu Lys Asn Glu Gln Thr Leu Arg Ala Asp Glu Ile

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<210> 494
<211> 743
<212> PRT
<213> Homo sapiens

<220>
<221> VARIANT
<222> 403, 522, 615
<223> Xaa = Any Amino Acid

<400> 494
Met Lys Leu Leu Met Val Leu Met Leu Ala Ala Leu Ser Gln His Cys
 1             5             10             15

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Tyr Ala Gly Ser Gly Cys Pro Leu Leu Glu Asn Val Ile Ser Lys Thr
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 Ile Asn Pro Gln Val Ser Lys Thr Glu Tyr Lys Glu Leu Leu Gln Glu
 35 40 45
 Phe Ile Asp Asp Asn Ala Thr Thr Asn Ala Ile Asp Glu Leu Lys Glu
 50 55 60
 Cys Phe Leu Asn Gln Thr Asp Glu Thr Leu Ser Asn Val Glu Val Phe
 65 70 75 80
 Met Gln Leu Ile Tyr Asp Ser Ser Leu Cys Asp Leu Phe Met Ser Pro
 85 90 95
 Ala Lys Glu Thr Ser Glu Lys Phe Thr Trp Ala Ala Lys Gly Arg Pro
 100 105 110
 Arg Lys Ile Ala Trp Glu Lys Lys Glu Thr Pro Val Lys Thr Gly Cys
 115 120 125
 Val Ala Arg Val Thr Ser Asn Lys Thr Lys Val Leu Glu Lys Gly Arg
 130 135 140
 Ser Lys Met Ile Ala Cys Pro Thr Lys Glu Ser Ser Thr Lys Ala Ser
 145 150 155 160
 Ala Asn Asp Gln Arg Phe Pro Ser Glu Ser Lys Gln Glu Glu Asp Glu
 165 170 175
 Glu Tyr Ser Cys Asp Ser Arg Ser Leu Phe Glu Ser Ser Ala Lys Ile
 180 185 190
 Gln Val Cys Ile Pro Glu Ser Ile Tyr Gln Lys Val Met Glu Ile Asn
 195 200 205
 Arg Glu Val Glu Glu Pro Pro Lys Lys Pro Ser Ala Phe Lys Pro Ala
 210 215 220
 Ile Glu Met Gln Asn Ser Val Pro Asn Lys Ala Phe Glu Leu Lys Asn
 225 230 235 240
 Glu Gln Thr Leu Arg Ala Asp Pro Met Phe Pro Pro Glu Ser Lys Gln
 245 250 255
 Lys Asp Tyr Glu Glu Asn Ser Trp Asp Ser Glu Ser Leu Cys Glu Thr
 260 265 270
 Val Ser Gln Lys Asp Val Cys Leu Pro Lys Ala Thr His Gln Lys Glu
 275 280 285
 Ile Asp Lys Ile Asn Gly Lys Leu Glu Glu Ser Pro Asn Lys Asp Gly
 290 295 300
 Leu Leu Lys Ala Thr Cys Gly Met Lys Val Ser Ile Pro Thr Lys Ala
 305 310 315 320
 Leu Glu Leu Lys Asp Met Gln Thr Phe Lys Ala Glu Pro Pro Gly Lys
 325 330 335
 Pro Ser Ala Phe Glu Pro Ala Thr Glu Met Gln Lys Ser Val Pro Asn
 340 345 350
 Lys Ala Leu Glu Leu Lys Asn Glu Gln Thr Leu Arg Ala Asp Glu Ile
 355 360 365
 Leu Pro Ser Glu Ser Lys Gln Lys Asp Tyr Glu Glu Ser Ser Trp Asp
 370 375 380
 Ser Glu Ser Leu Cys Glu Thr Val Ser Gln Lys Asp Val Cys Leu Pro
 385 390 395 400
 Lys Ala Xaa His Gln Lys Glu Ile Asp Lys Ile Asn Gly Lys Leu Glu
 405 410 415
 Gly Ser Pro Val Lys Asp Gly Leu Leu Lys Ala Asn Cys Gly Met Lys
 420 425 430
 Val Ser Ile Pro Thr Lys Ala Leu Glu Leu Met Asp Met Gln Thr Phe
 435 440 445

Lys Ala Glu Pro Pro Glu Lys Pro Ser Ala Phe Glu Pro Ala Ile Glu
 450 455 460
 Met Gln Lys Ser Val Pro Asn Lys Ala Leu Glu Leu Lys Asn Glu Gln
 465 470 475 480
 Thr Leu Arg Ala Asp Glu Ile Leu Pro Ser Glu Ser Lys Gln Lys Asp
 485 490 495
 Tyr Glu Glu Ser Ser Trp Asp Ser Glu Ser Leu Cys Glu Thr Val Ser
 500 505 510
 Gln Lys Asp Val Cys Leu Pro Lys Ala Xaa His Gln Lys Glu Ile Asp
 515 520 525
 Lys Ile Asn Gly Lys Leu Glu Glu Ser Pro Asp Asn Asp Gly Phe Leu
 530 535 540
 Lys Ala Pro Cys Arg Met Lys Val Ser Ile Pro Thr Lys Ala Leu Glu
 545 550 555 560
 Leu Met Asp Met Gln Thr Phe Lys Ala Glu Pro Pro Glu Lys Pro Ser
 565 570 575
 Ala Phe Glu Pro Ala Ile Glu Met Gln Lys Ser Val Pro Asn Lys Ala
 580 585 590
 Leu Glu Leu Lys Asn Glu Gln Thr Leu Arg Ala Asp Gln Met Phe Pro
 595 600 605
 Ser Glu Ser Lys Gln Lys Xaa Val Glu Glu Asn Ser Trp Asp Ser Glu
 610 615 620
 Ser Leu Arg Glu Thr Val Ser Gln Lys Asp Val Cys Val Pro Lys Ala
 625 630 635 640
 Thr His Gln Lys Glu Met Asp Lys Ile Ser Gly Lys Leu Glu Asp Ser
 645 650 655
 Thr Ser Leu Ser Lys Ile Leu Asp Thr Val His Ser Cys Glu Arg Ala
 660 665 670
 Arg Glu Leu Gln Lys Asp His Cys Glu Gln Arg Thr Gly Lys Met Glu
 675 680 685
 Gln Met Lys Lys Lys Phe Cys Val Leu Lys Lys Lys Leu Ser Glu Ala
 690 695 700
 Lys Glu Ile Lys Ser Gln Leu Glu Asn Gln Lys Val Lys Trp Glu Gln
 705 710 715 720
 Glu Leu Cys Ser Val Arg Phe Leu Thr Leu Met Lys Met Lys Ile Ile
 725 730 735
 Ser Tyr Met Lys Ile Ala Cys
 740

<210> 495

<211> 410

<212> PRT

<213> Homo sapiens

<400> 495

Met Lys Leu Leu Met Val Leu Met Leu Ala Ala Leu Ser Gln His Cys
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 Tyr Ala Gly Ser Gly Cys Pro Leu Leu Glu Asn Val Ile Ser Lys Thr
 20 25 30
 Ile Asn Pro Gln Val Ser Lys Thr Glu Tyr Lys Glu Leu Leu Gln Glu
 35 40 45
 Phe Ile Asp Asp Asn Ala Thr Thr Asn Ala Ile Asp Glu Leu Lys Glu
 50 55 60

Cys Phe Leu Asn Gln Thr Asp Glu Thr Leu Ser Asn Val Glu Val Phe
 65 70 75 80
 Met Gln Leu Ile Tyr Asp Ser Ser Leu Cys Asp Leu Phe Met Gly Thr
 85 90 95
 Arg Ala Leu Gln Cys Glu Val Ser His Thr His Glu Asn Glu Asn Tyr
 100 105 110
 Leu Leu His Glu Asn Cys Met Leu Lys Lys Glu Ile Ala Met Leu Lys
 115 120 125
 Leu Glu Ile Ala Thr Leu Lys His Gln Tyr Gln Glu Lys Glu Asn Lys
 130 135 140
 Tyr Phe Glu Asp Ile Lys Ile Leu Lys Glu Lys Asn Ala Glu Leu Gln
 145 150 155 160
 Met Thr Leu Lys Leu Lys Glu Glu Ser Leu Thr Lys Arg Ala Ser Gln
 165 170 175
 Tyr Ser Gly Gln Leu Lys Val Leu Ile Ala Glu Asn Thr Met Leu Thr
 180 185 190
 Ser Lys Leu Lys Glu Lys Gln Asp Lys Glu Ile Leu Glu Ala Glu Ile
 195 200 205
 Glu Ser His His Pro Arg Leu Ala Ser Ala Val Gln Asp His Asp Gln
 210 215 220
 Ile Val Thr Ser Arg Lys Ser Gln Glu Pro Ala Phe His Ile Ala Gly
 225 230 235 240
 Asp Ala Cys Leu Gln Arg Lys Met Asn Val Asp Val Ser Ser Thr Ile
 245 250 255
 Tyr Asn Asn Glu Val Leu His Gln Pro Leu Ser Glu Ala Gln Arg Lys
 260 265 270
 Ser Lys Ser Leu Lys Ile Asn Leu Asn Tyr Ala Gly Asp Ala Leu Arg
 275 280 285
 Glu Asn Thr Leu Val Ser Glu His Ala Gln Arg Asp Gln Arg Glu Thr
 290 295 300
 Gln Cys Gln Met Lys Glu Ala Glu His Met Tyr Gln Asn Glu Gln Asp
 305 310 315 320
 Asn Val Asn Lys His Thr Glu Gln Gln Glu Ser Leu Asp Gln Lys Leu
 325 330 335
 Phe Gln Leu Gln Ser Lys Asn Met Trp Leu Gln Gln Gln Leu Val His
 340 345 350
 Ala His Lys Lys Ala Asp Asn Lys Ser Lys Ile Thr Ile Asp Ile His
 355 360 365
 Phe Leu Glu Arg Lys Met Gln His His Leu Leu Lys Glu Lys Asn Glu
 370 375 380
 Glu Ile Phe Asn Tyr Asn Asn His Leu Lys Asn Arg Ile Tyr Gln Tyr
 385 390 395 400
 Glu Lys Glu Lys Ala Glu Thr Glu Val Ile
 405 410

<210> 496

<211> 20

<212> PRT

<213> Homo sapiens

<400> 496

Ile Asp Glu Leu Lys Glu Cys Phe Leu Asn Gln Thr Asp Glu Thr Leu
 1 5 10 15

Ser Asn Val Glu
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<210> 497
<211> 15
<212> PRT
<213> Homo sapiens

<400> 497
Thr Thr Asn Ala Ile Asp Glu Leu Lys Glu Cys Phe Leu Asn Gln
1 5 10 15

<210> 498
<211> 21
<212> PRT
<213> Homo sapiens

<400> 498
Ser Gln His Cys Tyr Ala Gly Ser Gly Cys Pro Leu Leu Glu Asn Val
1 5 10 15
Ile Ser Lys Thr Ile
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<210> 499
<211> 20
<212> PRT
<213> Homo sapiens

<400> 499
Glu Tyr Lys Glu Leu Leu Gln Glu Phe Ile Asp Asp Asn Ala Thr Thr
1 5 10 15
Asn Ala Ile Asp
20

<210> 500
<211> 9
<212> PRT
<213> Homo sapiens

<400> 500
Lys Leu Leu Met Val Leu Met Leu Ala
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<210> 501
<211> 13
<212> PRT
<213> Homo sapiens

<400> 501

Gln Glu Phe Ile Asp Asp Asn Ala Thr Thr Asn Ala Ile
 1 5 10

<210> 502
 <211> 13
 <212> PRT
 <213> Homo sapiens

<400> 502
 Leu Lys Glu Cys Phe Leu Asn Gln Thr Asp Glu Thr Leu
 1 5 10

<210> 503
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 503
 Met Lys Leu Leu Met Val Leu Met Leu Ala Ala Leu Ser Gln His Cys
 1 5 10 15
 Tyr Ala Gly Ser Gly Cys Pro Leu Leu Glu Asn Val Ile Ser Lys Thr
 20 25 30
 Ile Asn Pro Gln Val Ser Lys Thr Glu Tyr Lys Glu Leu Leu Gln Glu
 35 40 45
 Phe Ile Asp Asp Asn Ala Thr Thr Asn Ala Ile Asp Glu Leu Lys Glu
 50 55 60
 Cys Phe Leu Asn Gln Thr Asp Glu Thr Leu Ser Asn Val Glu Val Phe
 65 70 75 80
 Met Gln Leu Ile Tyr Asp Ser Ser Leu Cys Asp Leu Phe
 85 90

<210> 504
 <211> 1964
 <212> DNA
 <213> Homo sapiens

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 agcccagctc aagctggtgg cccctggacgg gctgctctat gccatcggtg gcgaatgcct 360
 gtacagcatg gactgctacg acccgcgaa acagcctgg accccacgcg cgccactccc 420
 cgcaggcacc ttccctgtgg ccacagaggc tgtggcctgc cgtggggaca tctacgtcac 480
 cgggggtcac ctcttctacc gcctgctcag gtacagcccc gtgaaggatg cttggggacga 540
 gtgcccatac agtgccagcc accggcggtt cagcgacatc gttgcactgg ggggcttcct 600
 gtaccgcttc gacctgctgc ggggcgtggg cgccgccgtg atgcgctaca acacagtgc 660
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 caccctgggc aacaccattt actgcctcaa cccccaggtc actgccacct tcacggtctc 780
 tggggggact gccagttcc aggccaagga gctgcagccc ttccccttgg ggagcaccgg 840


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gcctgagagg ccgggggtca gggaaggggc tgggatcgga acttcctgct cttgtttctg 1020
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cctctttctg cccctcactc cacacccaga ctgtttcctg actcaattcc gtacctactt 1140
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taccaacccc gtagctatct gggctgtttt ggcactgtgg attctcaagg gcctagaacc 1440
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atgatgcgtt ttctcccctt acgcactttg aaacccatgc tagaaaagtg aatacatctg 1860
actgtgctcc actccaacct ccagcctgga tgtccctgtc tgggcccttt ttctgttttt 1920
tattctatgt tcagcaccac tggcaccaaa tacattttta ttca 1964

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<210> 505
 <211> 732
 <212> DNA
 <213> Homo sapiens

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<400> 505
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cagcaggccc gagcccagct caagctggtg gccctggacg ggctgctcta tgccatcggt 180
ggcgaatgcc tgtacagcat ggagtgttac gaccgcgcaa cagacgcctg gaccccacgc 240
gcgccactcc ccgcaggcac cttccctgtg gccacagagg ctgtggcctg ccgtggggag 300
atctacgtca ccgggggtca cctcttctac cgctgctca ggtacagccc cgtgaaggat 360
gcttgggacg agtgcccata cagtgccagc caccggcggt ccagcgcacat cgttgcaactg 420
gggggcttcc tgtaccgctt cgacctgctg cggggcggtg gcgccgccgt gatgcgctac 480
aacacagtga ccggctcctg gagcagggtt gcctccctgc cctgcccgcc ccccgcccca 540
ctgcgctgca ccacctggg caacaccatt tactgcctca acccccaggc cactgccacc 600
ttcacggtct ctggggggac tgcccagttc caggccaagg agctgcagcc cttccccttg 660
gggagcaccg gggctcctag tccattcatc ctgactctgc cccctgagga ccggtctgcag 720
acctcactct ga 732

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<210> 506
 <211> 729
 <212> DNA
 <213> Homo sapiens

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<400> 506
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cagcaggccc gagcccagct caagctggtg gccctggacg ggctgctcta tgccatcggt 180
ggcgaatgcc tgtacagcat ggagtgttac gaccgcgcaa cagacgcctg gaccccacgc 240
gcgccactcc ccgcaggcac cttccctgtg gccacagagg ctgtggcctg ccgtggggag 300
atctacgtca ccgggggtca cctcttctac cgctgctca ggtacagccc cgtgaaggat 360
gcttgggacg agtgcccata cagtgccagc caccggcggt ccagcgcacat cgttgcaactg 420
gggggcttcc tgtaccgctt cgacctgctg cggggcggtg gcgccgccgt gatgcgctac 480

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<210> 507
<211> 243
<212> PRT
<213> Homo sapiens
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[illegible]

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<210> 508
<211> 158
<212> PRT
<213> Homo sapiens
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Met His Asn Tyr Leu Phe Leu Ala Gly Gly Ile Arg Gly Ser Gly Ala
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Lys Ala Val Cys Ser Asn Glu Val Phe Cys Tyr Asn Pro Leu Thr Asn
 20 25 30
 Ile Trp Ser Gln Val Arg Pro Met Gln Gln Ala Arg Ala Gln Leu Lys
 35 40 45
 Leu Val Ala Leu Asp Gly Leu Leu Tyr Ala Ile Gly Gly Glu Cys Leu
 50 55 60
 Tyr Ser Met Glu Cys Tyr Asp Pro Arg Thr Asp Ala Trp Thr Pro Arg
 65 70 75 80
 Ala Pro Leu Pro Ala Gly Thr Phe Pro Val Ala His Glu Ala Val Ala
 85 90 95
 Cys Arg Gly Asp Ile Tyr Val Thr Gly Gly His Leu Phe Tyr Arg Leu
 100 105 110
 Leu Arg Tyr Ser Pro Val Lys Asp Ala Trp Asp Glu Cys Pro Tyr Ser
 115 120 125
 Ala Ser His Arg Arg Ser Ser Asp Ile Val Ala Leu Gly Gly Phe Leu
 130 135 140
 Tyr Arg Phe Asp Leu Leu Arg Gly Val Gly Ala Ala Val Met
 145 150 155

<210> 509
 <211> 85
 <212> PRT
 <213> Homo sapiens

<400> 509
 Arg Tyr Asn Thr Val Thr Gly Ser Trp Ser Arg Ala Ala Ser Leu Pro
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 20 25 30
 Tyr Cys Leu Asn Pro Gln Val Thr Ala Thr Phe Thr Val Ser Gly Gly
 35 40 45
 Thr Ala Gln Phe Gln Ala Lys Glu Leu Gln Pro Phe Pro Leu Gly Ser
 50 55 60
 Thr Gly Val Leu Ser Pro Phe Ile Leu Thr Leu Pro Pro Glu Asp Arg
 65 70 75 80
 Leu Gln Thr Ser Leu
 85

<210> 510
 <211> 732
 <212> DNA
 <213> Homo sapiens

<400> 510
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 ctgctgcagc tgcccgcgcc gtcgagcgcc tctgagatcc ccaaggggaa gcaaaaggcg 120
 cagctccggc agagggaggt ggtggacctg tataatggaa tgtgcttaca agggccagca 180
 ggagtgcctg gtcgagacgg gagccctggg gccaatgtta ttccgggtac acctgggacg 240
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 tcctggacac ccaactacaa gcagtgttca tggagtccat tgaattatgg catagatctt 360
 gggaaaattg cggagtgtac atttacaag atgcgttcaa atagtgtctt aagagttttg 420
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<212> DNA
<213> Homo sapiens
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<210> 512
<211> 837
<212> DNA
<213> Homo sapiens
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<210> 513
<211> 837
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<400> 513
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tacaagcagt gttcatggag ttcatagaat tatggcatag atcttgggaa aattgaggag 480
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aattcaacaa ttaatatcca tcgcacttct tctgtggaag gactttgtga aggaattggt 720
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<210> 514

<211> 243

<212> PRT

<213> Homo sapiens

<400> 514

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Leu Leu Leu Leu Leu Leu Gln Leu Pro Ala Pro Ser Ser Ala Ser Glu
          20          25          30
Ile Pro Lys Gly Lys Gln Lys Ala Gln Leu Arg Gln Arg Glu Val Val
          35          40          45
Asp Leu Tyr Asn Gly Met Cys Leu Gln Gly Pro Ala Gly Val Pro Gly
          50          55          60
Arg Asp Gly Ser Pro Gly Ala Asn Val Ile Pro Gly Thr Pro Gly Ile
          65          70          75          80
Pro Gly Arg Asp Gly Phe Lys Gly Glu Lys Gly Glu Cys Leu Arg Glu
          85          90          95
Ser Phe Glu Glu Ser Trp Thr Pro Asn Tyr Lys Gln Cys Ser Trp Ser
          100          105          110
Ser Leu Asn Tyr Gly Ile Asp Leu Gly Lys Ile Ala Glu Cys Thr Phe
          115          120          125
Thr Lys Met Arg Ser Asn Ser Ala Leu Arg Val Leu Phe Ser Gly Ser
          130          135          140
Leu Arg Leu Lys Cys Arg Asn Ala Cys Cys Gln Arg Trp Tyr Phe Thr
          145          150          155          160
Phe Asn Gly Ala Glu Cys Ser Gly Pro Leu Pro Ile Glu Ala Ile Ile
          165          170          175
Tyr Leu Asp Gln Gly Ser Pro Glu Met Asn Ser Thr Ile Asn Ile His
          180          185          190
Arg Thr Ser Ser Val Glu Gly Leu Cys Glu Gly Ile Gly Ala Gly Leu
          195          200          205
Val Asp Val Ala Ile Trp Val Gly Thr Cys Ser Asp Tyr Pro Lys Gly
          210          215          220
Asp Ala Ser Thr Gly Trp Asn Ser Val Ser Arg Ile Ile Ile Glu Glu
          225          230          235          240
Leu Pro Lys

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<210> 515

<211> 278
 <212> PRT
 <213> Homo sapiens

<400> 515

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Met Gln Pro Ala Ala Ala Ser Glu Arg Gly Gly Ala Asp Ala Asp His
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Val Pro Leu Leu Gly Leu Leu Arg Leu Gln Leu Arg Ala Ala Arg Gln
                    20                      25                      30
Pro Gly Ala Met Arg Pro Gln Gly Pro Ala Ala Ser Pro Gln Arg Leu
                    35                      40                      45
Arg Gly Leu Leu Leu Leu Leu Leu Leu Gln Leu Pro Ala Pro Ser Ser
                    50                      55                      60
Ala Ser Glu Ile Pro Lys Gly Lys Gln Lys Ala Gln Leu Arg Gln Arg
                    65                      70                      75                      80
Glu Val Val Asp Leu Tyr Asn Gly Met Cys Leu Gln Gly Pro Ala Gly
                    85                      90                      95
Val Pro Gly Arg Asp Gly Ser Pro Gly Ala Asn Val Ile Pro Gly Thr
                    100                     105                     110
Pro Gly Ile Pro Gly Arg Asp Gly Phe Lys Gly Glu Lys Gly Glu Cys
                    115                     120                     125
Leu Arg Glu Ser Phe Glu Glu Ser Trp Thr Pro Asn Tyr Lys Gln Cys
                    130                     135                     140
Ser Trp Ser Ser Leu Asn Tyr Gly Ile Asp Leu Gly Lys Ile Ala Glu
                    145                     150                     155                     160
Cys Thr Phe Thr Lys Met Arg Ser Asn Ser Ala Leu Arg Val Leu Phe
                    165                     170                     175
Ser Gly Ser Leu Arg Leu Lys Cys Arg Asn Ala Cys Cys Gln Arg Trp
                    180                     185                     190
Tyr Phe Thr Phe Asn Gly Ala Glu Cys Ser Gly Pro Leu Pro Ile Glu
                    195                     200                     205
Ala Ile Ile Tyr Leu Asp Gln Gly Ser Pro Glu Met Asn Ser Thr Ile
                    210                     215                     220
Asn Ile His Arg Thr Ser Ser Val Glu Gly Leu Cys Glu Gly Ile Gly
                    225                     230                     235                     240
Ala Gly Leu Val Asp Val Ala Ile Trp Val Gly Thr Cys Ser Asp Tyr
                    245                     250                     255
Pro Lys Gly Asp Ala Ser Thr Gly Trp Asn Ser Val Ser Arg Ile Ile
                    260                     265                     270
Ile Glu Glu Leu Pro Lys
                    275

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<210> 516
 <211> 197
 <212> PRT
 <213> Homo sapiens

<400> 516

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Met Arg Pro Gln Gly Pro Ala Ala Ser Pro Gln Arg Leu Arg Gly Leu
                    5                      10                      15
Leu Leu Leu Leu Leu Leu Gln Leu Pro Ala Pro Ser Ser Ala Ser Glu
                    20                      25                      30
Ile Pro Lys Gly Lys Gln Lys Ala Gln Leu Arg Gln Arg Glu Val Val

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35 40 45
 Asp Leu Tyr Asn Gly Met Cys Leu Gln Gly Pro Ala Gly Val Pro Gly
 50 55 60
 Arg Asp Gly Ser Pro Gly Ala Asn Val Ile Pro Gly Thr Pro Gly Ile
 65 70 75 80
 Pro Gly Arg Asp Gly Phe Lys Gly Glu Lys Gly Glu Cys Leu Arg Glu
 85 90 95
 Ser Phe Glu Glu Ser Trp Thr Pro Asn Tyr Lys Gln Cys Ser Trp Ser
 100 105 110
 Ser Leu Asn Tyr Gly Ile Asp Leu Gly Lys Ile Ala Glu Cys Thr Phe
 115 120 125
 Thr Lys Met Arg Ser Asn Ser Ala Leu Arg Val Leu Phe Ser Gly Ser
 130 135 140
 Leu Arg Leu Lys Cys Arg Asn Ala Cys Cys Gln Arg Trp Tyr Phe Thr
 145 150 155 160
 Phe Asn Gly Ala Glu Cys Ser Gly Pro Leu Pro Ile Glu Ala Ile Ile
 165 170 175
 Tyr Leu Asp Gln Gly Ser Pro Glu Met Asn Ser Thr Ile Asn Ile His
 180 185 190
 Arg Thr Ser Ser Val
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<210> 517
 <211> 232
 <212> PRT
 <213> Homo sapiens

<400> 517
 Met Gln Pro Ala Ala Ala Ser Glu Arg Gly Gly Ala Asp Ala Asp His
 5 10 15
 Val Pro Leu Leu Gly Leu Leu Arg Leu Gln Leu Arg Ala Ala Arg Gln
 20 25 30
 Pro Gly Ala Met Arg Pro Gln Gly Pro Ala Ala Ser Pro Gln Arg Leu
 35 40 45
 Arg Gly Leu Leu Leu Leu Leu Leu Leu Gln Leu Pro Ala Pro Ser Ser
 50 55 60
 Ala Ser Glu Ile Pro Lys Gly Lys Gln Lys Ala Gln Leu Arg Gln Arg
 65 70 75 80
 Glu Val Val Asp Leu Tyr Asn Gly Met Cys Leu Gln Gly Pro Ala Gly
 85 90 95
 Val Pro Gly Arg Asp Gly Ser Pro Gly Ala Asn Val Ile Pro Gly Thr
 100 105 110
 Pro Gly Ile Pro Gly Arg Asp Gly Phe Lys Gly Glu Lys Gly Glu Cys
 115 120 125
 Leu Arg Glu Ser Phe Glu Glu Ser Trp Thr Pro Asn Tyr Lys Gln Cys
 130 135 140
 Ser Trp Ser Ser Leu Asn Tyr Gly Ile Asp Leu Gly Lys Ile Ala Glu
 145 150 155 160
 Cys Thr Phe Thr Lys Met Arg Ser Asn Ser Ala Leu Arg Val Leu Phe
 165 170 175
 Ser Gly Ser Leu Arg Leu Lys Cys Arg Asn Ala Cys Cys Gln Arg Trp
 180 185 190
 Tyr Phe Thr Phe Asn Gly Ala Glu Cys Ser Gly Pro Leu Pro Ile Glu

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<211> 46
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<213> Homo sapiens
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<212> PRT
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<212> DNA
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<210> 522
<211> 60
<212> DNA
<213> Homo sapiens
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<400> 522
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<210> 523
<211> 60
<212> DNA
<213> Homo sapiens

<400> 523
aaaaatatgt ggcttcaaca gcaattagtt catgcacata agaaagctga caacaaaagc 60

<210> 524
<211> 63
<212> DNA
<213> Homo sapiens

<400> 524
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gca 63

<210> 525
<211> 60
<212> DNA
<213> Homo sapiens

<400> 525
actgaacagc aggagtctct agatcagaaa ttatttcaac tacaaagcaa aaatatgtgg 60

<210> 526
<211> 63
<212> DNA
<213> Homo sapiens

<400> 526
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gaa 63

<210> 527
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<212> DNA
<213> Homo sapiens

<400> 527
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<210> 528
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<212> DNA
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<400> 528
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<210> 529

<211> 60
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<400> 529
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<210> 530
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<210> 531
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<400> 531
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<400> 532
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<210> 533
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<400> 533
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 caa 63

<210> 534
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 <212> PRT
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<400> 534
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 Thr Leu Lys His Gln
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<210> 535
 <211> 20

<212> PRT

<213> Homo sapiens

<400> 535

Leu Lys His Gln Tyr Gln Glu Lys Glu Asn Lys Tyr Phe Glu Asp Ile
 5 10 15
 Lys Ile Leu Lys
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<210> 536

<211> 20

<212> PRT

<213> Homo sapiens

<400> 536

Glu Asn Lys Tyr Phe Glu Asp Ile Lys Ile Leu Lys Glu Lys Asn Ala
 5 10 15
 Glu Leu Gln Met
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<210> 537

<211> 20

<212> PRT

<213> Homo sapiens

<400> 537

Lys Ser Gln Glu Pro Ala Phe His Ile Ala Gly Asp Ala Cys Leu Gln
 5 10 15
 Arg Lys Met Asn
 20

<210> 538

<211> 20

<212> PRT

<213> Homo sapiens

<400> 538

Ile Ala Gly Asp Ala Cys Leu Gln Arg Lys Met Asn Val Asp Val Ser
 5 10 15
 Ser Thr Ile Tyr
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<210> 539

<211> 20

<212> PRT

<213> Homo sapiens

<400> 539

Arg Lys Met Asn Val Asp Val Ser Ser Thr Ile Tyr Asn Asn Glu Val
 5 10 15

Leu His Gln Pro
20

<210> 540
<211> 20
<212> PRT
<213> Homo sapiens

<400> 540
Ser Thr Ile Tyr Asn Asn Glu Val Leu His Gln Pro Leu Ser Glu Ala
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Gln Arg Lys Ser
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<210> 541
<211> 21
<212> PRT
<213> Homo sapiens

<400> 541
Ala Gln Arg Lys Ser Lys Ser Leu Lys Ile Asn Leu Asn Tyr Ala Gly
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Asp Ala Leu Arg Glu
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<210> 542
<211> 20
<212> PRT
<213> Homo sapiens

<400> 542
Thr Glu Gln Gln Glu Ser Leu Asp Gln Lys Leu Phe Gln Leu Gln Ser
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Lys Asn Met Trp
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<210> 543
<211> 21
<212> PRT
<213> Homo sapiens

<400> 543
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Gln Leu Val His Ala
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<210> 544
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<212> PRT

<213> Homo sapiens

<400> 544

Lys Asn Met Trp Leu Gln Gln Gln Leu Val His Ala His Lys Lys Ala
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<210> 545

<211> 20

<212> PRT

<213> Homo sapiens

<400> 545

Asp Asn Lys Ser Lys Ile Thr Ile Asp Ile His Phe Leu Glu Arg Lys
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 Met Gln His His
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<210> 546

<211> 20

<212> PRT

<213> Homo sapiens

<400> 546

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 Asn Asn His Leu
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<210> 547

<211> 20

<212> PRT

<213> Homo sapiens

<400> 547

Lys Asn Glu Glu Ile Phe Asn Tyr Asn Asn His Leu Lys Asn Arg Ile
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 Tyr Gln Tyr Glu
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<210> 548

<211> 3045

<212> DNA

<213> Homo sapiens

<400> 548

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<210> 549

<211> 1953

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 985

<223> n = A,T,C or G

<400> 549

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gaatcatcta caaaagcaag tgccaatgat cagaggttcc catcagaatc caaacaagag 240
gaagatgaag aatattcttg tgattctcgg agtctctttg agagttctgc aaagattcaa 300
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tccaaacaaa aggactatga agaaaattct tgggattctg agagtctctg tgagactgtt 540
tcacagaagg atgtgtgttt acccaaggct acacatcaaa aagaaataga taaaataaat 600
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ttttgtgtac tgaaaaagaa actgtcagaa gcaaaagaaa taaaatcaca gttagagaac 1860
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<210> 550

<211> 978

<212> DNA

<213> Homo sapiens

<400> 550

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gaggacatta agatttttaa agaaaaagaat gctgaacttc agatgaccct aaaactgaaa 240
gaggaatcat taactaaaag ggcattctca tatagtgggc agcttaaagt tctgatagct 300
gagaacacaa tgctcacttc taaattgaag gaaaaacaag acaaagaaat actagaggca 360

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ctaagagaaa atacattggg ttcagaacat gcacaaagag accaacgtga aacacagtgt 660
caaatgaagg aagctgaaca catgtatcaa aacgaacaag ataatgtgaa caaacacact 720
gaacagcagg agtctctaga tcagaaatta tttcaactac aaagcaaaaa tatgtggctt 780
caacagcaat tagttcatgc acataagaaa gctgacaaca aaagcaagat aacaattgat 840
attcattttc ttgagaggaa aatgcaacat catctcctaa aagagaaaaa tgaggagata 900
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acagaagtta tataatag                                     978

```

<210> 551

<211> 324

<212> PRT

<213> Homo sapiens

<400> 551

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Met Gln His His His His His His Gly Thr Arg Ala Leu Gln Cys Glu
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```

```

Val Ser His Thr His Glu Asn Glu Asn Tyr Leu Leu His Glu Asn Cys
                        20                      25                      30

```

```

Met Leu Lys Lys Glu Ile Ala Met Leu Lys Leu Glu Ile Ala Thr Leu
                        35                      40                      45

```

```

Lys His Gln Tyr Gln Glu Lys Glu Asn Lys Tyr Phe Glu Asp Ile Lys
                        50                      55                      60

```

```

Ile Leu Lys Glu Lys Asn Ala Glu Leu Gln Met Thr Leu Lys Leu Lys
                        65                      70                      75                      80

```

```

Glu Glu Ser Leu Thr Lys Arg Ala Ser Gln Tyr Ser Gly Gln Leu Lys
                        85                      90                      95

```

```

Val Leu Ile Ala Glu Asn Thr Met Leu Thr Ser Lys Leu Lys Glu Lys
                        100                     105                     110

```

```

Gln Asp Lys Glu Ile Leu Glu Ala Glu Ile Glu Ser His His Pro Arg
                        115                     120                     125

```

```

Leu Ala Ser Ala Val Gln Asp His Asp Gln Ile Val Thr Ser Arg Lys
                        130                     135                     140

```

```

Ser Gln Glu Pro Ala Phe His Ile Ala Gly Asp Ala Cys Leu Gln Arg
                        145                     150                     155                     160

```

```

Lys Met Asn Val Asp Val Ser Ser Thr Ile Tyr Asn Asn Glu Val Leu
                        165                     170                     175

```

```

His Gln Pro Leu Ser Glu Ala Gln Arg Lys Ser Lys Ser Leu Lys Ile
                        180                     185                     190

```


Ser Cys Asp Ser Arg Ser Leu Phe Glu Ser Ser Ala Lys Ile Gln Val
100 105 110

Cys	Ile	Pro	Glu	Ser	Ile	Tyr	Gln	Lys	Val	Met	Glu	Ile	Asn	Arg	Glu
		115					120					125			
Val	Glu	Glu	Pro	Pro	Lys	Lys	Pro	Ser	Ala	Phe	Lys	Pro	Ala	Ile	Glu
	130					135					140				
Met	Gln	Asn	Ser	Val	Pro	Asn	Lys	Ala	Phe	Glu	Leu	Lys	Asn	Glu	Gln
145					150					155					160
Thr	Leu	Arg	Ala	Asp	Pro	Met	Phe	Pro	Pro	Glu	Ser	Lys	Gln	Lys	Asp
				165					170					175	
Tyr	Glu	Glu	Asn	Ser	Trp	Asp	Ser	Glu	Ser	Leu	Cys	Glu	Thr	Val	Ser
			180					185					190		
Gln	Lys	Asp	Val	Cys	Leu	Pro	Lys	Ala	Thr	His	Gln	Lys	Glu	Ile	Asp
		195					200					205			
Lys	Ile	Asn	Gly	Lys	Leu	Glu	Glu	Ser	Pro	Asn	Lys	Asp	Gly	Leu	Leu
	210					215					220				
Lys	Ala	Thr	Cys	Gly	Met	Lys	Val	Ser	Ile	Pro	Thr	Lys	Ala	Leu	Glu
225					230					235					240
Leu	Lys	Asp	Met	Gln	Thr	Phe	Lys	Ala	Glu	Pro	Pro	Gly	Lys	Pro	Ser
				245					250					255	
Ala	Phe	Glu	Pro	Ala	Thr	Glu	Met	Gln	Lys	Ser	Val	Pro	Asn	Lys	Ala
			260					265					270		
Leu	Glu	Leu	Lys	Asn	Glu	Gln	Thr	Leu	Arg	Ala	Asp	Glu	Ile	Leu	Pro
	275						280					285			
Ser	Glu	Ser	Lys	Gln	Lys	Asp	Tyr	Glu	Glu	Asn	Ser	Trp	Asp	Thr	Glu
	290					295					300				
Ser	Leu	Cys	Glu	Thr	Val	Ser	Gln	Lys	Asp	Val	Cys	Leu	Pro	Lys	Ala
305					310					315					320
Ala	His	Gln	Lys	Glu	Ile	Asp	Lys	Ile	Asn	Gly	Lys	Leu	Glu	Gly	Ser
				325					330					335	
Pro	Gly	Lys	Asp	Gly	Leu	Leu	Lys	Ala	Asn	Cys	Gly	Met	Lys	Val	Ser
			340					345					350		
Ile	Pro	Thr	Lys	Ala	Leu	Glu	Leu	Met	Asp	Met	Gln	Thr	Phe	Lys	Ala
		355					360					365			
Glu	Pro	Pro	Glu	Lys	Pro	Ser	Ala	Phe	Glu	Pro	Ala	Ile	Glu	Met	Gln
	370					375					380				
Lys	Ser	Val	Pro	Asn	Lys	Ala	Leu	Glu	Leu	Lys	Asn	Glu	Gln	Thr	Leu
385					390					395					400

Arg Ala Asp Glu Ile Leu Pro Ser Glu Ser Lys Gln Lys Asp Tyr Glu
 405 410 415
 Glu Ser Ser Trp Asp Ser Glu Ser Leu Cys Glu Thr Val Ser Gln Lys
 420 425 430
 Asp Val Cys Leu Pro Lys Ala Ala His Gln Lys Glu Ile Asp Lys Ile
 435 440 445
 Asn Gly Lys Leu Glu Glu Ser Pro Asp Asn Asp Gly Phe Leu Lys Ser
 450 455 460
 Pro Cys Arg Met Lys Val Ser Ile Pro Thr Lys Ala Leu Glu Leu Met
 465 470 475 480
 Asp Met Gln Thr Phe Lys Ala Glu Pro Pro Glu Lys Pro Ser Ala Phe
 485 490 495
 Glu Pro Ala Ile Glu Met Gln Lys Ser Val Pro Asn Lys Ala Leu Glu
 500 505 510
 Leu Lys Asn Glu Gln Thr Leu Arg Ala Asp Gln Met Phe Pro Ser Glu
 515 520 525
 Ser Lys Gln Lys Asn Val Glu Glu Asn Ser Trp Asp Ser Glu Ser Leu
 530 535 540
 Arg Glu Thr Val Ser Gln Lys Asp Val Cys Val Pro Lys Ala Thr His
 545 550 555 560
 Gln Lys Glu Met Asp Lys Ile Ser Gly Lys Leu Glu Asp Ser Thr Ser
 565 570 575
 Leu Ser Lys Ile Leu Asp Thr Val His Ser Cys Glu Arg Ala Arg Glu
 580 585 590
 Leu Gln Lys Asp His Cys Glu Gln Arg Thr Gly Lys Met Glu Gln Met
 595 600 605
 Lys Lys Lys Phe Cys Val Leu Lys Lys Lys Leu Ser Glu Ala Lys Glu
 610 615 620
 Ile Lys Ser Gln Leu Glu Asn Gln Lys Val Lys Trp Glu Gln Glu Leu
 625 630 635 640
 Cys Ser Val Arg Phe Leu Thr Leu Met Lys Met Lys Ile Ile Ser Tyr
 645 650 655
 Met Lys Ile Ala Cys
 660

<211> 1013
 <212> PRT
 <213> Homo sapiens

<400> 553

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Met Gln His His His His His His Val Gly Ser Met Ser Pro Ala Lys
              5              10              15

Glu Thr Ser Glu Lys Phe Thr Trp Ala Ala Lys Gly Arg Pro Arg Lys
              20              25              30

Ile Ala Trp Glu Lys Lys Glu Thr Pro Val Lys Thr Gly Cys Val Ala
              35              40              45

Arg Val Thr Ser Asn Lys Thr Lys Val Leu Glu Lys Gly Arg Ser Lys
              50              55              60

Met Ile Ala Cys Pro Thr Lys Glu Ser Ser Thr Lys Ala Ser Ala Asn
              65              70              75              80

Asp Gln Arg Phe Pro Ser Glu Ser Lys Gln Glu Glu Asp Glu Glu Tyr
              85              90              95

Ser Cys Asp Ser Arg Ser Leu Phe Glu Ser Ser Ala Lys Ile Gln Val
              100              105              110

Cys Ile Pro Glu Ser Ile Tyr Gln Lys Val Met Glu Ile Asn Arg Glu
              115              120              125

Val Glu Glu Pro Pro Lys Lys Pro Ser Ala Phe Lys Pro Ala Ile Glu
              130              135              140

Met Gln Asn Ser Val Pro Asn Lys Ala Phe Glu Leu Lys Asn Glu Gln
              145              150              155              160

Thr Leu Arg Ala Asp Pro Met Phe Pro Pro Glu Ser Lys Gln Lys Asp
              165              170              175

Tyr Glu Glu Asn Ser Trp Asp Ser Glu Ser Leu Cys Glu Thr Val Ser
              180              185              190

Gln Lys Asp Val Cys Leu Pro Lys Ala Thr His Gln Lys Glu Ile Asp
              195              200              205

Lys Ile Asn Gly Lys Leu Glu Glu Ser Pro Asn Lys Asp Gly Leu Leu
              210              215              220

Lys Ala Thr Cys Gly Met Lys Val Ser Ile Pro Thr Lys Ala Leu Glu
              225              230              235              240

Leu Lys Asp Met Gln Thr Phe Lys Ala Glu Pro Pro Gly Lys Pro Ser
              245              250              255

Ala Phe Glu Pro Ala Thr Glu Met Gln Lys Ser Val Pro Asn Lys Ala

```

260	265	270
Leu Glu Leu Lys Asn Glu Gln Thr Leu Arg Ala Asp Glu Ile Leu Pro		
275	280	285
Ser Glu Ser Lys Gln Lys Asp Tyr Glu Glu Asn Ser Trp Asp Thr Glu		
290	295	300
Ser Leu Cys Glu Thr Val Ser Gln Lys Asp Val Cys Leu Pro Lys Ala		
305	310	315
Ala His Gln Lys Glu Ile Asp Lys Ile Asn Gly Lys Leu Glu Gly Ser		
325	330	335
Pro Gly Lys Asp Gly Leu Leu Lys Ala Asn Cys Gly Met Lys Val Ser		
340	345	350
Ile Pro Thr Lys Ala Leu Glu Leu Met Asp Met Gln Thr Phe Lys Ala		
355	360	365
Glu Pro Pro Glu Lys Pro Ser Ala Phe Glu Pro Ala Ile Glu Met Gln		
370	375	380
Lys Ser Val Pro Asn Lys Ala Leu Glu Leu Lys Asn Glu Gln Thr Leu		
385	390	395
Arg Ala Asp Glu Ile Leu Pro Ser Glu Ser Lys Gln Lys Asp Tyr Glu		
405	410	415
Glu Ser Ser Trp Asp Ser Glu Ser Leu Cys Glu Thr Val Ser Gln Lys		
420	425	430
Asp Val Cys Leu Pro Lys Ala Ala His Gln Lys Glu Ile Asp Lys Ile		
435	440	445
Asn Gly Lys Leu Glu Glu Ser Pro Asp Asn Asp Gly Phe Leu Lys Ser		
450	455	460
Pro Cys Arg Met Lys Val Ser Ile Pro Thr Lys Ala Leu Glu Leu Met		
465	470	475
Asp Met Gln Thr Phe Lys Ala Glu Pro Pro Glu Lys Pro Ser Ala Phe		
485	490	495
Glu Pro Ala Ile Glu Met Gln Lys Ser Val Pro Asn Lys Ala Leu Glu		
500	505	510
Leu Lys Asn Glu Gln Thr Leu Arg Ala Asp Gln Met Phe Pro Ser Glu		
515	520	525
Ser Lys Gln Lys Asn Val Glu Glu Asn Ser Trp Asp Ser Glu Ser Leu		
530	535	540
Arg Glu Thr Val Ser Gln Lys Asp Val Cys Val Pro Lys Ala Thr His		

545 550 555 560
 Gln Lys Glu Met Asp Lys Ile Ser Gly Lys Leu Glu Asp Ser Thr Ser
 565 570 575
 Leu Ser Lys Ile Leu Asp Thr Val His Ser Cys Glu Arg Ala Arg Glu
 580 585 590
 Leu Gln Lys Asp His Cys Glu Gln Arg Thr Gly Lys Met Glu Gln Met
 595 600 605
 Lys Lys Lys Phe Cys Val Leu Lys Lys Lys Leu Ser Glu Ala Lys Glu
 610 615 620
 Ile Lys Ser Gln Leu Glu Asn Gln Lys Val Lys Trp Glu Gln Glu Leu
 625 630 635 640
 Cys Ser Val Arg Leu Thr Leu Asn Gln Glu Glu Glu Lys Arg Arg Asn
 645 650 655
 Ala Asp Ile Leu Asn Glu Lys Ile Arg Glu Glu Leu Gly Arg Ile Glu
 660 665 670
 Glu Gln His Arg Lys Glu Leu Glu Val Lys Gln Gln Leu Glu Gln Ala
 675 680 685
 Leu Arg Ile Gln Asp Ile Glu Leu Lys Ser Val Glu Ser Asn Leu Asn
 690 695 700
 Gln Val Ser His Thr His Glu Asn Glu Asn Tyr Leu Leu His Glu Asn
 705 710 715 720
 Cys Met Leu Lys Lys Glu Ile Ala Met Leu Lys Leu Glu Ile Ala Thr
 725 730 735
 Leu Lys His Gln Tyr Gln Glu Lys Glu Asn Lys Tyr Phe Glu Asp Ile
 740 745 750
 Lys Ile Leu Lys Glu Lys Asn Ala Glu Leu Gln Met Thr Leu Lys Leu
 755 760 765
 Lys Glu Glu Ser Leu Thr Lys Arg Ala Ser Gln Tyr Ser Gly Gln Leu
 770 775 780
 Lys Val Leu Ile Ala Glu Asn Thr Met Leu Thr Ser Lys Leu Lys Glu
 785 790 795 800
 Lys Gln Asp Lys Glu Ile Leu Glu Ala Glu Ile Glu Ser His His Pro
 805 810 815
 Arg Leu Ala Ser Ala Val Gln Asp His Asp Gln Ile Val Thr Ser Arg
 820 825 830
 Lys Ser Gln Glu Pro Ala Phe His Ile Ala Gly Asp Ala Cys Leu Gln

835	840	845
Arg Lys Met Asn Val Asp Val Ser Ser Thr Ile Tyr Asn Asn Glu Val		
850	855	860
Leu His Gln Pro Leu Ser Glu Ala Gln Arg Lys Ser Lys Ser Leu Lys		
865	870	875
Ile Asn Leu Asn Tyr Ala Gly Asp Ala Leu Arg Glu Asn Thr Leu Val		
	885	890
Ser Glu His Ala Gln Arg Asp Gln Arg Glu Thr Gln Cys Gln Met Lys		
	900	905
Glu Ala Glu His Met Tyr Gln Asn Glu Gln Asp Asn Val Asn Lys His		
	915	920
Thr Glu Gln Gln Glu Ser Leu Asp Gln Lys Leu Phe Gln Leu Gln Ser		
	930	935
Lys Asn Met Trp Leu Gln Gln Gln Leu Val His Ala His Lys Lys Ala		
	945	950
Asp Asn Lys Ser Lys Ile Thr Ile Asp Ile His Phe Leu Glu Arg Lys		
	965	970
Met Gln His His Leu Leu Lys Glu Lys Asn Glu Glu Ile Phe Asn Tyr		
	980	985
Asn Asn His Leu Lys Asn Arg Ile Tyr Gln Tyr Glu Lys Glu Lys Ala		
	995	1000
Glu Thr Glu Val Ile		
1010		

<210> 554
 <211> 25
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer

<400> 554
 gtcggctcca tgagtcccg c aaaag

25

<210> 555
 <211> 36
 <212> DNA
 <213> Artificial Sequence

<220>

<223> PCR primer

<400> 555
cgagaattca atacttaaga agaccatctt taccag 36

<210> 556
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 556
cataagctta aggctaactg cggaatgaaa g 31

<210> 557
<211> 35
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 557
ccgcgagaat tcaacatgca attttcatgt aagag 35

<210> 558
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 558
ctaaatgccg gcacaagagc tctgc 25

<210> 559
<211> 35
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 559
cgcgagaat totattatat aacttctgtt tctgc 35

<210> 560
 <211> 26
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer

<400> 560
 ggggaattgt gagcggataa caattc 26

<210> 561
 <211> 36
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 <213> Artificial Sequence

<220>
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<400> 561
 cgtagaattc aacctgattt aaattacttt ctacac 36

<210> 562
 <211> 31
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer

<400> 562
 gaaagtaatt taaatcaggt ttctcacact c 31

<210> 563
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer

<400> 563
 gaggccccaa ggggttatgc tag 23

<210> 564
 <211> 4458
 <212> DNA

<213> Homo sapiens

<400> 564

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ggcgaacaca ggacacctct gatgaaggct ctacaatgcc atcaggaggc ttgtgcaaat 300
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ctctgcagtg tgagattgac tttaaaccaa gaagaagaga agagaagaaa tgccgatata 3060

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ttaaataaaa aaattagga agaattagga agaatacgaag agcagcatag gaaagagtta 3120
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gaaagtaatt tgaatcaggt ttctcacact catgaaaatg aaaattatct cttacatgaa 3240
aattgcatgt tgaaaaagga aattgccatg ctaaaactgg aaatagccac actgaaacac 3300
caataccagg aaaaggaaaa taaatacttt gaggacatta agatttttaa agaaaagaat 3360
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gagactccac ctcggaag 4458

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<210> 565

<211> 1341

<212> PRT

<213> Homo sapiens

<400> 565

Met Thr Lys Arg Lys Lys Thr Ile Asn Leu Asn Ile Gln Asp Ala Gln
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20 25 30

Val Thr Phe Leu Val Asp Arg Lys Cys Gln Leu Asp Val Leu Asp Gly
35 40 45

Glu His Arg Thr Pro Leu Met Lys Ala Leu Gln Cys His Gln Glu Ala
50 55 60

Cys Ala Asn Ile Leu Ile Asp Ser Gly Ala Asp Ile Asn Leu Val Asp
65 70 75 80

Val Tyr Gly Asn Met Ala Leu His Tyr Ala Val Tyr Ser Glu Ile Leu
85 90 95

Ser Val Val Ala Lys Leu Leu Ser His Gly Ala Val Ile Glu Val His
100 105 110

Asn Lys Ala Ser Leu Thr Pro Leu Leu Leu Ser Ile Thr Lys Arg Ser
115 120 125

Glu Gln Ile Val Glu Phe Leu Leu Ile Lys Asn Ala Asn Ala Asn Ala
 130 135 140
 Val Asn Lys Tyr Lys Cys Thr Ala Leu Met Leu Ala Val Cys His Gly
 145 150 155 160
 Ser Ser Glu Ile Val Gly Met Leu Leu Gln Gln Asn Val Asp Val Phe
 165 170 175
 Ala Ala Asp Ile Cys Gly Val Thr Ala Glu His Tyr Ala Val Thr Cys
 180 185 190
 Gly Phe His His Ile His Glu Gln Ile Met Glu Tyr Ile Arg Lys Leu
 195 200 205
 Ser Lys Asn His Gln Asn Thr Asn Pro Glu Gly Thr Ser Ala Gly Thr
 210 215 220
 Pro Asp Glu Ala Ala Pro Leu Ala Glu Arg Thr Pro Asp Thr Ala Glu
 225 230 235 240
 Ser Leu Val Glu Lys Thr Pro Asp Glu Ala Ala Pro Leu Val Glu Arg
 245 250 255
 Thr Pro Asp Thr Ala Glu Ser Leu Val Glu Lys Thr Pro Asp Glu Ala
 260 265 270
 Ala Ser Leu Val Glu Gly Thr Ser Asp Lys Ile Gln Cys Leu Glu Lys
 275 280 285
 Ala Thr Ser Gly Lys Phe Glu Gln Ser Ala Glu Glu Thr Pro Arg Glu
 290 295 300
 Ile Thr Ser Pro Ala Lys Glu Thr Ser Glu Lys Phe Thr Trp Pro Ala
 305 310 315 320
 Lys Gly Arg Pro Arg Lys Ile Ala Trp Glu Lys Lys Glu Asp Thr Pro
 325 330 335
 Arg Glu Ile Met Ser Pro Ala Lys Glu Thr Ser Glu Lys Phe Thr Trp
 340 345 350
 Ala Ala Lys Gly Arg Pro Arg Lys Ile Ala Trp Glu Lys Lys Glu Thr
 355 360 365
 Pro Val Lys Thr Gly Cys Val Ala Arg Val Thr Ser Asn Lys Thr Lys
 370 375 380
 Val Leu Glu Lys Gly Arg Ser Lys Met Ile Ala Cys Pro Thr Lys Glu
 385 390 395 400
 Ser Ser Thr Lys Ala Ser Ala Asn Asp Gln Arg Phe Pro Ser Glu Ser
 405 410 415

Lys	Gln	Glu	Glu	Asp	Glu	Glu	Tyr	Ser	Cys	Asp	Ser	Arg	Ser	Leu	Phe
420								425				430			
Glu	Ser	Ser	Ala	Lys	Ile	Gln	Val	Cys	Ile	Pro	Glu	Ser	Ile	Tyr	Gln
435								440				445			
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Glu	Ser	Leu	Cys	Glu	Thr	Val	Ser	Gln	Lys	Asp	Val	Cys	Leu	Pro	Lys
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Ser	Pro	Asn	Lys	Asp	Gly	Leu	Leu	Lys	Ala	Thr	Cys	Gly	Met	Lys	Val
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Ser	Ile	Pro	Thr	Lys	Ala	Leu	Glu	Leu	Lys	Asp	Met	Gln	Thr	Phe	Lys
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Ala	Glu	Pro	Pro	Gly	Lys	Pro	Ser	Ala	Phe	Glu	Pro	Ala	Thr	Glu	Met
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Gln	Lys	Ser	Val	Pro	Asn	Lys	Ala	Leu	Glu	Leu	Lys	Asn	Glu	Gln	Thr
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Glu	Glu	Asn	Ser	Trp	Asp	Thr	Glu	Ser	Leu	Cys	Glu	Thr	Val	Ser	Gln
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Ala	Asn	Cys	Gly	Met	Lys	Val	Ser	Ile	Pro	Thr	Lys	Ala	Leu	Glu	Leu
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690								695				700			

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 740 745 750
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 Pro Thr Lys Ala Leu Glu Leu Met Asp Met Gln Thr Phe Lys Ala Glu
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 Pro Pro Glu Lys Pro Ser Ala Phe Glu Pro Ala Ile Glu Met Gln Lys
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 Ser Val Pro Asn Lys Ala Leu Glu Leu Lys Asn Glu Gln Thr Leu Arg
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 1235 1240 1245
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Leu Val His Ala His Lys Lys Ala Asp Asn Lys Ser Lys Ile Thr Ile
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Asp Ile His Phe Leu Glu Arg Lys Met Gln His His Leu Leu Lys Glu
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<211> 1199

<212> DNA

<213> Homo sapiens

<400> 567

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 cagcctgacg tcttggatgg cgaacacagg acacctctga tgaaggctct acaatgccat 180
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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<210> 570

<211> 399

<212> PRT

<213> Homo sapiens

<400> 570

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Arg Thr Ala Leu His Trp Ala Cys Val Asn Gly His Glu Glu Val Val
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```

```

Thr Phe Leu Val Asp Arg Lys Cys Gln Leu Asp Val Leu Asp Gly Glu
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```

His Arg Thr Pro Leu Met Lys Ala Leu Gln Cys His Gln Glu Ala Cys
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```

Ala Asn Ile Leu Ile Asp Ser Gly Ala Asp Ile Asn Leu Val Asp Val
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```

Tyr Gly Asn Met Ala Leu His Tyr Ala Val Tyr Ser Glu Ile Leu Ser
          85                      90                      95

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```

Val Val Ala Lys Leu Leu Ser His Gly Ala Val Ile Glu Val His Asn
          100                      105                      110

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```

Lys Ala Ser Leu Thr Pro Leu Leu Leu Ser Ile Thr Lys Arg Ser Glu
          115                      120                      125

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```

Gln Ile Val Glu Phe Leu Leu Ile Lys Asn Ala Asn Ala Asn Ala Val
          130                      135                      140

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Asn Lys Tyr Lys Cys Thr Ala Leu Met Leu Ala Val Cys His Gly Ser
          145                      150                      155                      160

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```

Ser Glu Ile Val Gly Met Leu Leu Gln Gln Asn Val Asp Val Phe Ala
          165                      170                      175

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Ala Asp Ile Cys Gly Val Thr Ala Glu His Tyr Ala Val Thr Cys Gly
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Phe His His Ile His Glu Gln Ile Met Glu Tyr Ile Arg Lys Leu Ser
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Lys Asn His Gln Asn Thr Asn Pro Glu Gly Thr Ser Ala Gly Thr Pro
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 225 230 235 240

Leu Val Glu Lys Thr Pro Asp Glu Ala Ala Pro Leu Val Glu Arg Thr
 245 250 255

Pro Asp Thr Ala Glu Ser Leu Val Glu Lys Thr Pro Asp Glu Ala Ala
 260 265 270

Ser Leu Val Glu Gly Thr Ser Asp Lys Ile Gln Cys Leu Glu Lys Ala
 275 280 285

Thr Ser Gly Lys Phe Glu Gln Ser Ala Glu Glu Thr Pro Arg Glu Ile
 290 295 300

Thr Ser Pro Ala Lys Glu Thr Ser Glu Lys Phe Thr Trp Pro Ala Lys
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Gly Arg Pro Arg Lys Ile Ala Trp Glu Lys Lys Glu Asp Thr Pro Arg
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Glu Ile Met Ser Pro Ala Lys Glu Thr Ser Glu Lys Phe Thr Trp Ala
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Ala Lys Gly Arg Pro Arg Lys Ile Ala Trp Glu Lys Lys Glu Thr Pro
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Leu Glu Lys Gly Arg Ser Lys Met Ile Ala Cys Pro Thr Lys Glu
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<210> 571

<211> 247

<212> PRT

<213> Homo sapiens

<400> 571

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Glu His Tyr Ala Val Thr Cys Gly Phe His His Ile His Glu Gln Ile
 35 40 45

Met Glu Tyr Ile Arg Lys Leu Ser Lys Asn His Gln Asn Thr Asn Pro
 50 55 60

Glu Gly Thr Ser Ala Gly Thr Pro Asp Glu Ala Ala Pro Leu Ala Glu
65 70 75 80

Arg Thr Pro Asp Thr Ala Glu Ser Leu Val Glu Lys Thr Pro Asp Glu
85 90 95

Ala Ala Pro Leu Val Glu Arg Thr Pro Asp Thr Ala Glu Ser Leu Val
100 105 110

Glu Lys Thr Pro Asp Glu Ala Ala Ser Leu Val Glu Gly Thr Ser Asp
115 120 125

Lys Ile Gln Cys Leu Glu Lys Ala Thr Ser Gly Lys Phe Glu Gln Ser
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Ala Glu Glu Thr Pro Arg Glu Ile Thr Ser Pro Ala Lys Glu Thr Ser
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Glu Lys Phe Thr Trp Pro Ala Lys Gly Arg Pro Arg Lys Ile Ala Trp
165 170 175

Glu Lys Lys Glu Asp Thr Pro Arg Glu Ile Met Ser Pro Ala Lys Glu
180 185 190

Thr Ser Glu Lys Phe Thr Trp Ala Ala Lys Gly Arg Pro Arg Lys Ile
195 200 205

Ala Trp Glu Lys Lys Glu Thr Pro Val Lys Thr Gly Cys Val Ala Arg
210 215 220

Val Thr Ser Asn Lys Thr Lys Val Leu Glu Lys Gly Arg Ser Lys Met
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Ile Ala Cys Pro Thr Lys Glu
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<210> 572

<211> 399

<212> PRT

<213> Homo sapiens

<400> 572

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Arg Thr Ala Leu His Trp Ala Cys Val Asn Gly His Glu Glu Val Val
20 25 30

Thr Phe Leu Val Asp Arg Lys Cys Gln Pro Asp Val Leu Asp Gly Glu
35 40 45

His Arg Thr Pro Leu Met Lys Ala Leu Gln Cys His Gln Glu Ala Cys

50					55					60					
Ala	Asn	Ile	Leu	Ile	Asp	Ser	Gly	Ala	Asp	Ile	Asn	Leu	Val	Asp	Val
65					70					75					80
Tyr	Gly	Asn	Met	Ala	Leu	His	Tyr	Ala	Val	Tyr	Ser	Glu	Ile	Leu	Ser
				85					90					95	
Val	Val	Ala	Lys	Leu	Leu	Ser	His	Gly	Ala	Val	Ile	Glu	Val	His	Asn
			100					105					110		
Lys	Ala	Ser	Leu	Thr	Pro	Leu	Leu	Leu	Ser	Ile	Thr	Lys	Arg	Ser	Glu
		115					120					125			
Gln	Ile	Val	Glu	Phe	Leu	Leu	Ile	Lys	Asn	Ala	Asn	Ala	Asn	Ala	Val
	130						135					140			
Asn	Lys	Tyr	Lys	Cys	Thr	Ala	Leu	Met	Leu	Ala	Val	Cys	His	Gly	Leu
145					150					155					160
Ser	Glu	Ile	Val	Gly	Met	Leu	Leu	Gln	Gln	Asn	Val	Asp	Val	Phe	Ala
				165					170					175	
Ala	Asp	Ile	Cys	Gly	Val	Thr	Ala	Glu	His	Tyr	Ala	Val	Thr	Cys	Gly
			180					185					190		
Phe	His	His	Ile	His	Glu	Gln	Ile	Met	Glu	Tyr	Ile	Arg	Lys	Leu	Ser
		195					200					205			
Lys	Asn	His	Gln	Asn	Thr	Asn	Pro	Glu	Gly	Thr	Ser	Ala	Gly	Thr	Pro
	210					215					220				
Asp	Glu	Ala	Ala	Pro	Leu	Ala	Glu	Arg	Thr	Pro	Asp	Thr	Ala	Glu	Ser
225					230					235					240
Leu	Val	Glu	Lys	Thr	Pro	Asp	Glu	Ala	Ala	Pro	Leu	Val	Glu	Arg	Thr
				245					250					255	
Pro	Asp	Thr	Ala	Glu	Ser	Leu	Val	Glu	Lys	Thr	Pro	Asp	Glu	Ala	Ala
			260					265					270		
Ser	Leu	Val	Glu	Gly	Thr	Ser	Asp	Lys	Ile	Gln	Cys	Leu	Glu	Lys	Ala
		275					280					285			
Thr	Ser	Gly	Lys	Phe	Glu	Gln	Ser	Ala	Glu	Glu	Thr	Pro	Arg	Glu	Ile
	290					295					300				
Thr	Ser	Pro	Ala	Lys	Glu	Thr	Ser	Glu	Lys	Phe	Thr	Trp	Pro	Ala	Lys
305					310					315					320
Gly	Arg	Pro	Arg	Lys	Ile	Ala	Trp	Glu	Lys	Lys	Glu	Asp	Thr	Pro	Arg
				325					330					335	
Glu	Ile	Met	Ser	Pro	Ala	Lys	Glu	Thr	Ser	Glu	Lys	Phe	Thr	Trp	Ala

Ala Glu His Tyr Ala Val Thr Cys Gly Phe His His Ile His Glu Gln
 195 200 205
 Ile Met Glu Tyr Ile Arg Lys Leu Ser Lys Asn His Gln Asn Thr Asn
 210 215 220
 Pro Glu Gly Thr Ser Ala Gly Thr Pro Asp Glu Ala Ala Pro Leu Ala
 225 230 235 240
 Glu Arg Thr Pro Asp Thr Ala Glu Ser Leu Val Glu Lys Thr Pro Asp
 245 250 255
 Glu Ala Ala Pro Leu Val Glu Arg Thr Pro Asp Thr Ala Glu Ser Leu
 260 265 270
 Val Glu Lys Thr Pro Asp Glu Ala Ala Ser Leu Val Glu Gly Thr Ser
 275 280 285
 Asp Lys Ile Gln Cys Leu Glu Lys Ala Thr Ser Gly Lys Phe Glu Gln
 290 295 300
 Ser Ala Glu Glu Thr Pro Arg Glu Ile Thr Ser Pro Ala Lys Glu Thr
 305 310 315 320
 Ser Glu Lys Phe Thr Trp Pro Ala Lys Gly Arg Pro Arg Lys Ile Ala
 325 330 335
 Trp Glu Lys Lys Glu Asp Thr Pro Arg Glu Ile Met Ser Pro Ala Lys
 340 345 350
 Glu Thr Ser Glu Lys Phe Thr Trp Ala Ala Lys Gly Arg Pro Arg Lys
 355 360 365
 Ile Ala Trp Glu Lys Lys Glu Thr Pro Val Lys Thr Gly Cys Val Ala
 370 375 380
 Arg Val Thr Ser Asn Lys Thr Lys Val Leu Glu Lys Gly Arg Ser Lys
 385 390 395 400
 Met Ile Ala Cys Pro Thr Lys Glu Ser Ser Thr Lys Ala Ser Ala Asn
 405 410 415
 Asp Gln Arg Phe Pro Ser Glu Ser Lys Gln Glu Glu Asp Glu Glu Tyr
 420 425 430
 Ser Cys Asp Ser Arg Ser Leu Phe Glu Ser Ser Ala Lys Ile Gln Val
 435 440 445
 Cys Ile Pro Glu Ser Ile Tyr Gln Lys Val Met Glu Ile Asn Arg Glu
 450 455 460
 Val Glu Glu Pro Pro Lys Lys Pro Ser Ala Phe Lys Pro Ala Ile Glu
 465 470 475 480

Met Gln Asn Ser Val Pro Asn Lys Ala Phe Glu Leu Lys Asn Glu Gln
 485 490 495
 Thr Leu Arg Ala Asp Pro Met Phe Pro Pro Glu Ser Lys Gln Lys Asp
 500 505 510
 Tyr Glu Glu Asn Ser Trp Asp Ser Glu Ser Leu Cys Glu Thr Val Ser
 515 520 525
 Gln Lys Asp Val Cys Leu Pro Lys Ala Thr His Gln Lys Glu Ile Asp
 530 535 540
 Lys Ile Asn Gly Lys Leu Glu Glu Ser Pro Asn Lys Asp Gly Leu Leu
 545 550 555 560
 Lys Ala Thr Cys Gly Met Lys Val Ser Ile Pro Thr Lys Ala Leu Glu
 565 570 575
 Leu Lys Asp Met Gln Thr Phe Lys Ala Glu Pro Pro Gly Lys Pro Ser
 580 585 590
 Ala Phe Glu Pro Ala Thr Glu Met Gln Lys Ser Val Pro Asn Lys Ala
 595 600 605
 Leu Glu Leu Lys Asn Glu Gln Thr Trp Arg Ala Asp Glu Ile Leu Pro
 610 615 620
 Ser Glu Ser Lys Gln Lys Asp Tyr Glu Glu Asn Ser Trp Asp Thr Glu
 625 630 635 640
 Ser Leu Cys Glu Thr Val Ser Gln Lys Asp Val Cys Leu Pro Lys Ala
 645 650 655
 Ala His Gln Lys Glu Ile Asp Lys Ile Asn Gly Lys Leu Glu Gly Ser
 660 665 670
 Pro Val Lys Asp Gly Leu Leu Lys Ala Asn Cys Gly Met Lys Val Ser
 675 680 685
 Ile Pro Thr Lys Ala Leu Glu Leu Met Asp Met Gln Thr Phe Lys Ala
 690 695 700
 Glu Pro Pro Glu Lys Pro Ser Ala Phe Glu Pro Ala Ile Glu Met Gln
 705 710 715 720
 Lys Ser Val Pro Asn Lys Ala Leu Glu Leu Lys Asn Glu Gln Thr Leu
 725 730 735
 Arg Ala Asp Glu Ile Leu Pro Ser Glu Ser Lys Gln Lys Asp Tyr Glu
 740 745 750
 Glu Ser Ser Trp Asp Ser Glu Ser Leu Cys Glu Thr Val Ser Gln Lys
 755 760 765

Asp Val Cys Leu Pro Lys Ala Thr His Gln Lys Glu Ile Asp Lys Ile
 770 775 780
 Asn Gly Lys Leu Glu Glu Ser Pro Asp Asn Asp Gly Phe Leu Lys Ala
 785 790 795 800
 Pro Cys Arg Met Lys Val Ser Ile Pro Thr Lys Ala Leu Glu Leu Met
 805 810 815
 Asp Met Gln Thr Phe Lys Ala Glu Pro Pro Glu Lys Pro Ser Ala Phe
 820 825 830
 Glu Pro Ala Ile Glu Met Gln Lys Ser Val Pro Asn Lys Ala Leu Glu
 835 840 845
 Leu Lys Asn Glu Gln Thr Leu Arg Ala Asp Gln Met Phe Pro Ser Glu
 850 855 860
 Ser Lys Gln Lys Lys Val Glu Glu Asn Ser Trp Asp Ser Glu Ser Leu
 865 870 875 880
 Arg Glu Thr Val Ser Gln Lys Asp Val Cys Val Pro Lys Ala Thr His
 885 890 895
 Gln Lys Glu Met Asp Lys Ile Ser Gly Lys Leu Glu Asp Ser Thr Ser
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 Leu Ser Lys Ile Leu Asp Thr Val His Ser Cys Glu Arg Ala Arg Glu
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 Leu Gln Lys Asp His Cys Glu Gln Arg Thr Gly Lys Met Glu Gln Met
 930 935 940
 Lys Lys Lys Phe Cys Val Leu Lys Lys Lys Leu Ser Glu Ala Lys Glu
 945 950 955 960
 Ile Lys Ser Gln Leu Glu Asn Gln Lys Val Lys Trp Glu Gln Glu Leu
 965 970 975
 Cys Ser Val Arg Leu Thr Leu Asn Gln Glu Glu Glu Lys Arg Arg Asn
 980 985 990
 Ala Asp Ile Leu Asn Glu Lys Ile Arg Glu Glu Leu Gly Arg Ile Glu
 995 1000 1005
 Glu Gln His Arg Lys Glu Leu Glu Val Lys Gln Gln Leu Glu Gln Ala
 1010 1015 1020
 Leu Arg Ile Gln Asp Ile Glu Leu Lys Ser Val Glu Ser Asn Leu Asn
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 Gln Val Ser His Thr His Glu Asn Glu Asn Tyr Leu Leu His Glu Asn
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Cys Met Leu Lys Lys Glu Ile Ala Met Leu Lys Leu Glu Ile Ala Thr
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 Leu Lys His Gln Tyr Gln Glu Lys Glu Asn Lys Tyr Phe Glu Asp Ile
 1075 1080 1085
 Lys Ile Leu Lys Glu Lys Asn Ala Glu Leu Gln Met Thr Leu Lys Leu
 1090 1095 1100
 Lys Glu Glu Ser Leu Thr Lys Arg Ala Ser Gln Tyr Ser Gly Gln Leu
 1105 1110 1115 1120
 Lys Val Leu Ile Ala Glu Asn Thr Met Leu Thr Ser Lys Leu Lys Glu
 1125 1130 1135
 Lys Gln Asp Lys Glu Ile Leu Glu Ala Glu Ile Glu Ser His His Pro
 1140 1145 1150
 Arg Leu Ala Ser Ala Val Gln Asp His Asp Gln Ile Val Thr Ser Arg
 1155 1160 1165
 Lys Ser Gln Glu Pro Ala Phe His Ile Ala Gly Asp Ala Cys Leu Gln
 1170 1175 1180
 Arg Lys Met Asn Val Asp Val Ser Ser Thr Ile Tyr Asn Asn Glu Val
 1185 1190 1195 1200
 Leu His Gln Pro Leu Ser Glu Ala Gln Arg Lys Ser Lys Ser Leu Lys
 1205 1210 1215
 Ile Asn Leu Asn Tyr Ala Gly Asp Ala Leu Arg Glu Asn Thr Leu Val
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 Ser Glu His Ala Gln Arg Asp Gln Arg Glu Thr Gln Cys Gln Met Lys
 1235 1240 1245
 Glu Ala Glu His Met Tyr Gln Asn Glu Gln Asp Asn Val Asn Lys His
 1250 1255 1260
 Thr Glu Gln Gln Glu Ser Leu Asp Gln Lys Leu Phe Gln Leu Gln Ser
 1265 1270 1275 1280
 Lys Asn Met Trp Leu Gln Gln Gln Leu Val His Ala His Lys Lys Ala
 1285 1290 1295
 Asp Asn Lys Ser Lys Ile Thr Ile Asp Ile His Phe Leu Glu Arg Lys
 1300 1305 1310
 Met Gln His His Leu Leu Lys Glu Lys Asn Glu Glu Ile Phe Asn Tyr
 1315 1320 1325
 Asn Asn His Leu Lys Asn Arg Ile Tyr Gln Tyr Glu Lys Glu Lys Ala
 1330 1335 1340

Glu Thr Glu Val Ile
1345

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<213> Artificial Sequence

<220>
<223> PCR primer

<400> 574
cacacaaaga ggaagaagac catc

24

<210> 575
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 575
gattcttttg taggacatgc aatcatc

27

<210> 576
<211> 3720
<212> DNA
<213> Homo sapiens

<220>
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<222> 1149
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aaaaatgcaa atgcaaacgc atttaatgag tctaaatgca cagccctcat gcttgccata 180
tgtgaaggct catcagagat agtcggcatg cttcttcagc aaaatggtga cgtctttgct 240
gaagacatac atggaataac tgcagaacgt tatgctgctg ctgctggagt taattacatt 300
catcaacaac ttttggaaac tatacgaaaa ttacctaaaa atcctcaaaa taccaatcca 360
gaaggaaacat ctacagggaac acctgatgag gctgcaccct tggcggaag aacacctgac 420
acggctgaaa gcttgctgga aaaaacacct gacgaggctg cacgcttggt ggagggaacg 480
tctgccaaaa ttcaatgtct ggggaaagca acatctggaa agtttgaaca gtcaacagaa 540
gaaacacctt ggaaaatttt gaggcctaca aaagaaacat ctgagaaatt ttcattggcca 600
gcaaaagaaa gatctaggaa gatcacatgg gagggaaaag aaacatctgt aaagactgaa 660
tgcgtggcag gagtaacacc taataaaact gaagttttgg aaaaaggaac atctaatatg 720
attgcatgtc ctacaaaaga aacatctaca aaagcaagta caaatgtgga tgtgagttct 780
gtagagccta tattcagttc ttttggcaca cggactattg aaaattcaca gtgtacaaaa 840

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<213> Homo sapiens
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<400> 577

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Gln Thr Val Glu Phe Leu Leu Thr Lys Asn Ala Asn Ala Asn Ala Phe
      35                      40                      45

Asn Glu Ser Lys Cys Thr Ala Leu Met Leu Ala Ile Cys Glu Gly Ser
      50                      55                      60

Ser Glu Ile Val Gly Met Leu Leu Gln Gln Asn Val Asp Val Phe Ala
      65                      70                      75                      80

Glu Asp Ile His Gly Ile Thr Ala Glu Arg Tyr Ala Ala Ala Arg Gly
      85                      90                      95

Val Asn Tyr Ile His Gln Gln Leu Leu Glu His Ile Arg Lys Leu Pro
      100                     105                     110

Lys Asn Pro Gln Asn Thr Asn Pro Glu Gly Thr Ser Thr Gly Thr Pro
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Asp Glu Ala Ala Pro Leu Ala Glu Arg Thr Pro Asp Thr Ala Glu Ser
      130                     135                     140

Leu Leu Glu Lys Thr Pro Asp Glu Ala Ala Arg Leu Val Glu Gly Thr
      145                     150                     155                     160

Ser Ala Lys Ile Gln Cys Leu Gly Lys Ala Thr Ser Gly Lys Phe Glu
      165                     170                     175

Gln Ser Thr Glu Glu Thr Pro Arg Lys Ile Leu Arg Pro Thr Lys Glu
      180                     185                     190

Thr Ser Glu Lys Phe Ser Trp Pro Ala Lys Glu Arg Ser Arg Lys Ile
      195                     200                     205

Thr Trp Glu Glu Lys Glu Thr Ser Val Lys Thr Glu Cys Val Ala Gly
      210                     215                     220

Val Thr Pro Asn Lys Thr Glu Val Leu Glu Lys Gly Thr Ser Asn Met
      225                     230                     235                     240

Ile Ala Cys Pro Thr Lys Glu Thr Ser Thr Lys Ala Ser Thr Asn Val
      245                     250                     255

Asp Val Ser Ser Val Glu Pro Ile Phe Ser Leu Phe Gly Thr Arg Thr
      260                     265                     270

Ile Glu Asn Ser Gln Cys Thr Lys Val Glu Glu Asp Phe Asn Leu Ala
      275                     280                     285

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 Asp Ala Thr Tyr Gln Lys Asp Ile Lys Thr Ile Asn His Lys Ile Glu
 305 310 315 320
 Asp Gln Met Phe Pro Ser Glu Ser Lys Arg Glu Glu Asp Glu Glu Tyr
 325 330 335
 Ser Trp Asp Ser Gly Ser Leu Phe Glu Ser Ser Ala Lys Thr Gln Val
 340 345 350
 Cys Ile Pro Glu Ser Met Tyr Gln Lys Val Met Glu Ile Asn Arg Glu
 355 360 365
 Val Glu Glu Leu Pro Glu Lys Pro Ser Ala Phe Lys Pro Ala Val Glu
 370 375 380
 Met Gln Lys Thr Val Pro Asn Lys Ala Phe Glu Leu Lys Asn Glu Gln
 385 390 395 400
 Thr Leu Arg Ala Ala Gln Met Phe Pro Ser Glu Ser Lys Gln Lys Asp
 405 410 415
 Asp Glu Glu Asn Ser Trp Asp Ser Glu Ser Pro Cys Glu Thr Val Ser
 420 425 430
 Gln Lys Asp Val Tyr Leu Pro Lys Ala Thr His Gln Lys Glu Phe Asp
 435 440 445
 Thr Leu Ser Gly Lys Leu Glu Glu Ser Pro Val Lys Asp Gly Leu Leu
 450 455 460
 Lys Pro Thr Cys Gly Arg Lys Val Ser Leu Pro Asn Lys Ala Leu Glu
 465 470 475 480
 Leu Lys Asp Arg Glu Thr Phe Lys Ala Glu Ser Pro Asp Lys Asp Gly
 485 490 495
 Leu Leu Lys Pro Thr Cys Gly Arg Lys Val Ser Leu Pro Asn Lys Ala
 500 505 510
 Leu Glu Leu Lys Asp Arg Glu Thr Leu Lys Ala Glu Ser Pro Asp Asn
 515 520 525
 Asp Gly Leu Leu Lys Pro Thr Cys Gly Arg Lys Val Ser Leu Pro Asn
 530 535 540
 Lys Ala Leu Glu Leu Lys Asp Arg Glu Thr Phe Lys Ala Ala Gln Met
 545 550 555 560
 Phe Pro Ser Glu Ser Lys Gln Lys Asp Asp Glu Glu Asn Ser Trp Asp
 565 570 575

Phe Glu Ser Phe Leu Glu Thr Leu Leu Gln Asn Asp Val Cys Leu Pro
 580 585 590
 Lys Ala Thr His Gln Lys Glu Phe Asp Thr Leu Ser Gly Lys Leu Glu
 595 600 605
 Glu Ser Pro Asp Lys Asp Gly Leu Leu Lys Pro Thr Cys Gly Met Lys
 610 615 620
 Ile Ser Leu Pro Asn Lys Ala Leu Glu Leu Lys Asp Arg Glu Thr Phe
 625 630 635 640
 Lys Ala Glu Asp Val Ser Ser Val Glu Ser Thr Phe Ser Leu Phe Gly
 645 650 655
 Lys Pro Thr Thr Glu Asn Ser Gln Ser Thr Lys Val Glu Glu Asp Phe
 660 665 670
 Asn Leu Thr Thr Lys Glu Gly Ala Thr Lys Thr Val Thr Gly Gln Gln
 675 680 685
 Glu Arg Asp Ile Gly Ile Ile Glu Arg Ala Pro Gln Asp Gln Thr Asn
 690 695 700
 Lys Met Pro Thr Ser Glu Leu Gly Arg Lys Glu Asp Thr Lys Ser Thr
 705 710 715 720
 Ser Asp Ser Glu Ile Ile Ser Val Ser Asp Thr Gln Asn Tyr Glu Cys
 725 730 735
 Leu Pro Glu Ala Thr Tyr Gln Lys Glu Ile Lys Thr Thr Asn Gly Lys
 740 745 750
 Ile Glu Glu Ser Pro Glu Lys Pro Ser His Phe Glu Pro Ala Thr Glu
 755 760 765
 Met Gln Asn Ser Val Pro Asn Lys Gly Leu Glu Trp Lys Asn Lys Gln
 770 775 780
 Thr Leu Arg Ala Asp Ser Thr Thr Leu Ser Lys Ile Leu Asp Ala Leu
 785 790 795 800
 Pro Ser Cys Glu Arg Gly Arg Glu Leu Lys Lys Asp Asn Cys Glu Gln
 805 810 815
 Ile Thr Ala Lys Met Glu Gln Met Lys Asn Lys Phe Cys Val Leu Gln
 820 825 830
 Lys Glu Leu Ser Glu Ala Lys Glu Ile Lys Ser Gln Leu Glu Asn Gln
 835 840 845
 Lys Ala Lys Trp Glu Gln Glu Leu Cys Ser Val Arg Leu Pro Leu Asn
 850 855 860

Gln Glu Glu Glu Lys Arg Arg Asn Val Asp Ile Leu Lys Glu Lys Ile
 865 870 875 880
 Arg Pro Glu Glu Gln Leu Arg Lys Lys Leu Glu Val Lys His Gln Leu
 885 890 895
 Glu Gln Thr Leu Arg Ile Gln Asp Ile Glu Leu Lys Ser Val Thr Ser
 900 905 910
 Asn Leu Asn Gln Val Ser His Thr His Glu Ser Glu Asn Asp Leu Phe
 915 920 925
 His Glu Asn Cys Met Leu Lys Lys Glu Ile Ala Met Leu Lys Leu Glu
 930 935 940
 Val Ala Thr Leu Lys His Gln His Gln Val Lys Glu Asn Lys Tyr Phe
 945 950 955 960
 Glu Asp Ile Lys Ile Leu Gln Glu Lys Asn Ala Glu Leu Gln Met Thr
 965 970 975
 Leu Lys Leu Lys Gln Lys Thr Val Thr Lys Arg Ala Ser Gln Tyr Arg
 980 985 990
 Glu Gln Leu Lys Val Leu Thr Ala Glu Asn Thr Met Leu Thr Ser Lys
 995 1000 1005
 Leu Lys Glu Lys Gln Asp Lys Glu Ile Leu Glu Thr Glu Ile Glu Ser
 1010 1015 1020
 His His Pro Arg Leu Ala Ser Ala Leu Gln Asp His Asp Gln Ser Val
 1025 1030 1035 1040
 Thr Ser Arg Lys Asn Gln Glu Leu Ala Phe His Ser Ala Gly Asp Ala
 1045 1050 1055
 Pro Leu Gln Gly Ile Met Asn Val Asp Val Ser Asn Thr Ile Tyr Asn
 1060 1065 1070
 Asn Glu Val Leu His Gln Pro Leu Tyr Glu Ala Gln Arg Lys Ser Lys
 1075 1080 1085
 Ser Pro Lys Ile Asn Leu Asn Tyr Ala Gly Asp Asp Leu Arg Glu Asn
 1090 1095 1100
 Ala Leu Val Ser Glu His Ala Gln Arg Asp Arg Cys Glu Thr Gln Cys
 1105 1110 1115 1120
 Gln Met Lys Lys Ala Glu His Met Tyr Gln Asn Glu Gln Asp Asn Val
 1125 1130 1135
 Asp Lys His Thr Glu Gln Gln Glu Ser Leu Glu Gln Lys Leu Phe Gln
 1140 1145 1150

Leu Glu Ser Lys Asn Arg Trp Leu Arg Gln Gln Leu Val Tyr Ala His
 1155 1160 1165

Lys Lys Val Asn Lys Ser Lys Val Thr Ile Asn Ile Gln Phe Pro Glu
 1170 1175 1180

Met Lys Met Gln Arg His Leu Lys Glu Lys Asn Glu Glu Val Phe Asn
 1185 1190 1195 1200

Tyr Gly Asn His Leu Lys Glu Arg Ile Asp Gln Tyr Glu Lys Glu Lys
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Ala Glu Arg Glu Val Ser Ile Lys Lys Tyr Lys Tyr Phe Ser Asn Phe
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Leu Lys Glu Ser Gly Leu Gly
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Tyr Gln Tyr Glu
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Gln Lys Leu Phe
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Lys Asn Met Trp
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Lys Val Leu Ile
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Ser Thr Ile Tyr
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Leu His Gln Pro
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Met Leu Lys Leu
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<212> PRT
<213> Homo sapiens

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Thr Leu Lys His Gln
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Ala Glu Ile Glu

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<400> 589
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Arg Leu Ala Ser
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His Asp Gln Ile
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Lys Ser Gln Glu
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Arg Lys Met Asn
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<213> Homo sapiens

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 Ser His His Pro
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 Gln Asp His Asp
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<213> Homo sapiens

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Arg Leu Ala Ser Ala Val Gln Asp His Asp Gln Ile Val Thr Ser Arg
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 Lys Ser Gln Glu
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 Ala Gly Asp Ala Cys Leu
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 Val Asp Val Ser
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 Asp Gln Arg Glu
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 Glu Ala Glu His
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 Asp Asn Val Asn
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 Glu Ser Leu Asp
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Lys His Thr Glu Gln Gln Glu Ser Leu Asp Gln Lys Leu Phe Gln Leu
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 Gln Ser Lys Asn
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<212> PRT

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 Gln Leu Val His Ala
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Met Trp Leu Gln Gln Gln Leu Val His Ala His Lys Lys Ala Asp Asn
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 Lys Ser Lys Ile
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 His Lys Lys Ala Asp Asn Lys Ser Lys Ile Thr Ile Asp Ile His Phe
 1 5 10 15
 Leu Glu Arg Lys
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 1 5 10 15
 Lys Glu Lys Asn
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 Asn Asn His Leu
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 Tyr Glu Lys Glu
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 <211> 20
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Asn His Leu Lys Asn Arg Ile Tyr Gln Tyr Glu Lys Glu Lys Ala Glu
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 Thr Glu Val Ile
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<211> 27

<212> PRT

<213> Homo sapiens

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Leu Thr Leu Asn Gln Glu Glu Glu Lys Arg Arg Asn Ala Asp Ile Leu
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 Asn Glu Lys Ile Arg Glu Glu Leu Gly Cys Gly
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<212> PRT

<213> Homo sapiens

<400> 626

Ile Arg Glu Glu Leu Gly Arg Ile Glu Glu Gln His Arg Lys Glu Leu
 1 5 10 15
 Glu Val Lys Gln Gln Leu Glu Gln Ala Leu Gly Cys Gly
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<212> PRT

<213> Homo sapiens

<400> 627

Leu Glu Gln Ala Leu Arg Ile Gln Asp Ile Glu Leu Lys Ser Val Glu
 1 5 10 15
 Ser Asn Leu Asn Gln Gly Cys Gly
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